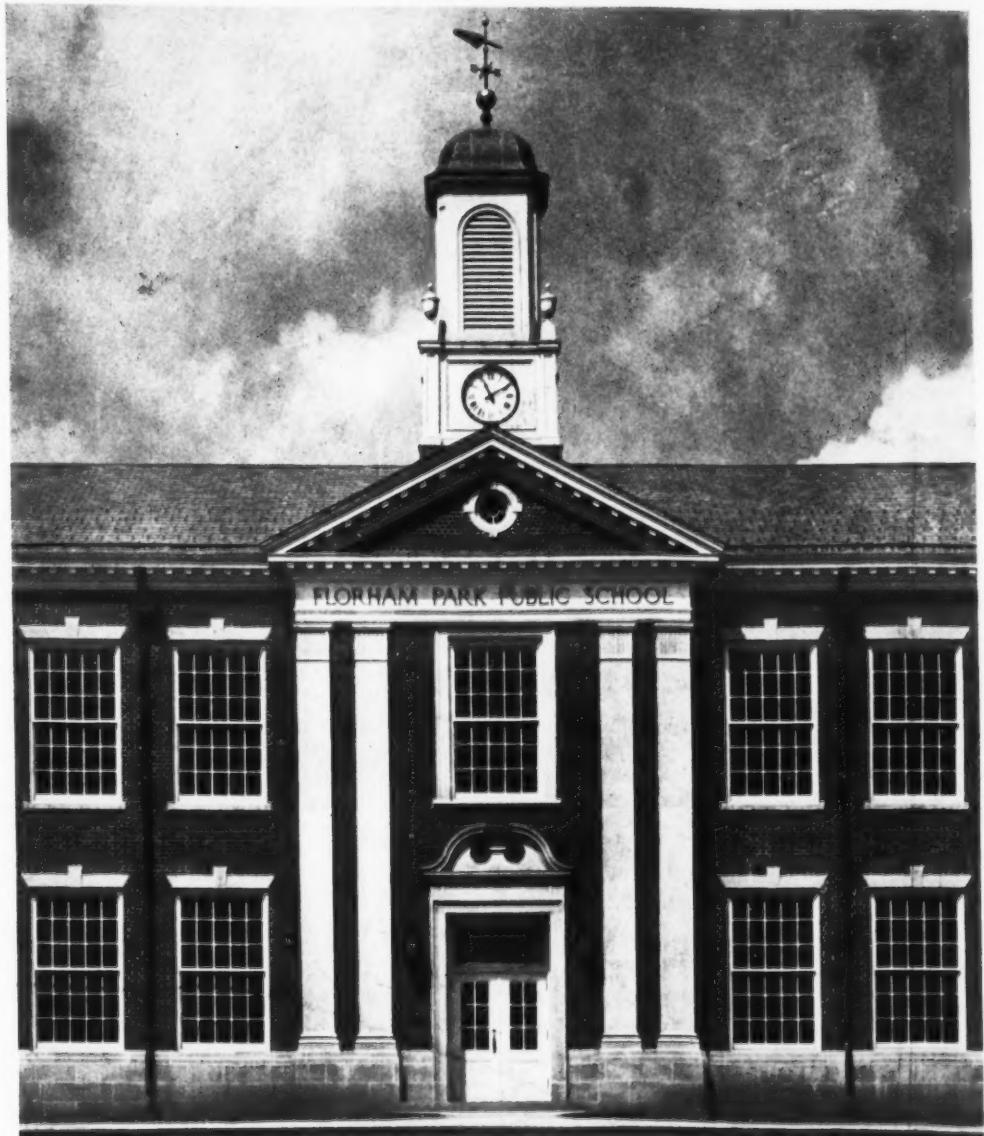


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THE AMERICAN *School Board Journal*

A PERIODICAL of SCHOOL ADMINISTRATION



December 1934

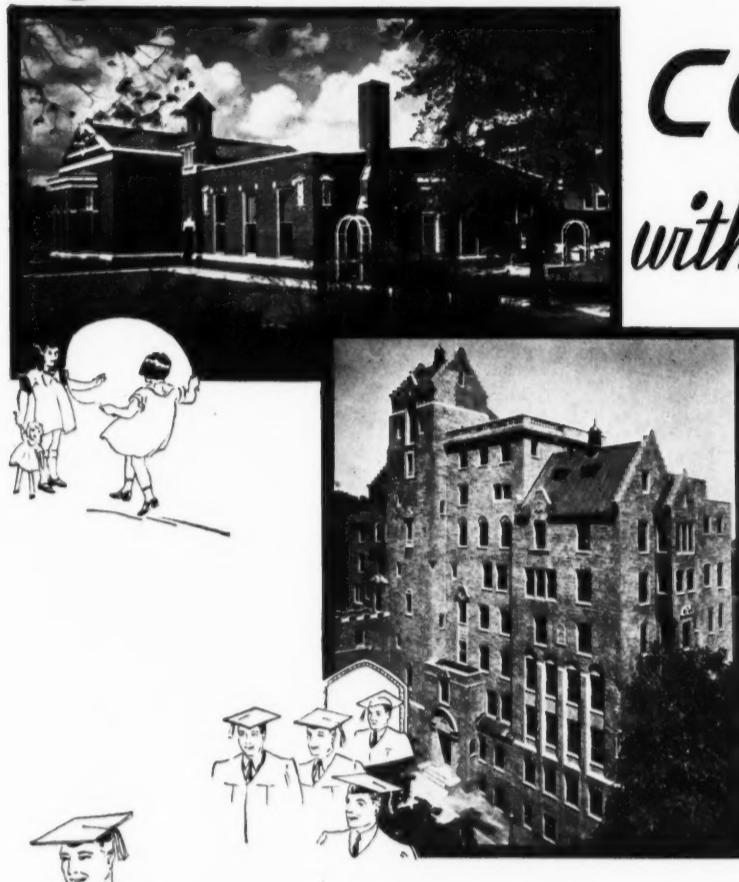
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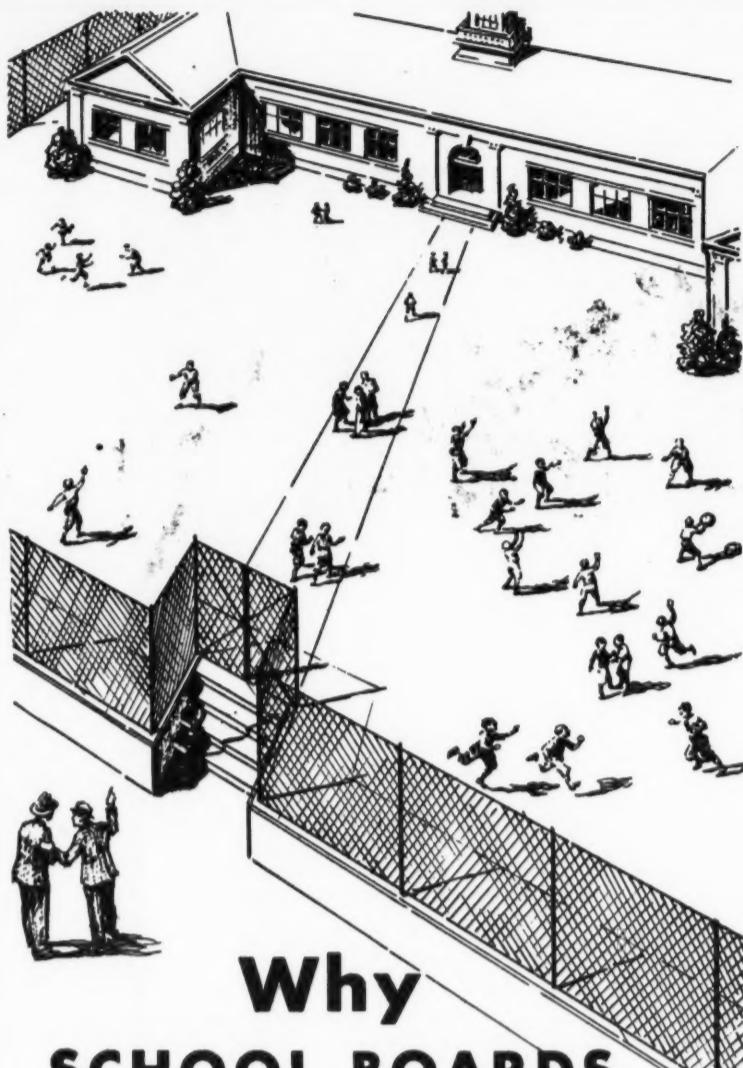
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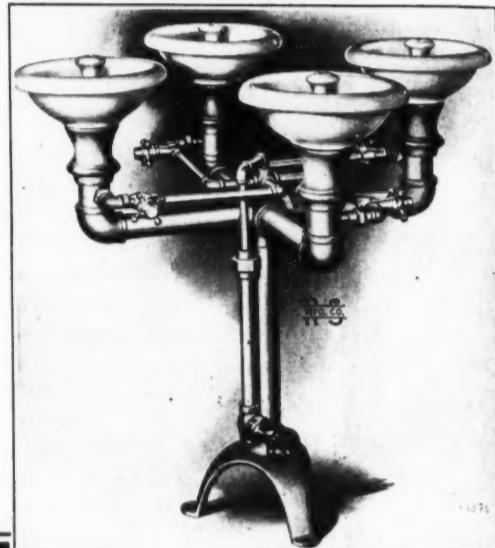


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built into the R-S Fountains illustrated, insures the permanency of their Sanitation. No. 91, at top, is a continuous flow model (individual control obtainable) with enameled bowl. No. 84, shown at right, has individually controlled bubblers with vitreous china bowls. All exposed brass fittings are chromium-plated.

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433

New Trier Township
High School Addition
Winnetka, Ill.



Walter R. McCormack
and Armstrong, Furst
& Tilton
ASSOCIATE ARCHITECTS

Architects heartily approve School Engineer's choice of Maple for School floors

Few problems in school construction require deeper consideration than that of selecting the material for floors. How will the flooring affect school room routine—the health and efficiency of pupils? Will it be an economy over a period of years? How easily can it be kept clean? Will it provide firm anchorage for desks? Will it simplify or hinder other construction work? These are some of the questions that must be asked—and answered.

Fortunately, one flooring material gives the proper answer to all these questions, *Northern Hard Maple*—the flooring material that combines warm, dry, cushioning effect beneath the feet, with lasting wear and smoothness.

Northern Hard Maple is resilient, tough-fibred, tight-grained. It will not sliver, splinter or develop ridges when subjected to the scuffing and pounding of youthful feet. It actually

All Class Room floors in the New Addition to New Trier Township High School are finished with 1½" face Maple flooring, and we believe that these floors, finished as they are with a good penetrating finish will withstand hard wear, be easy to keep clean and always keep their natural beauty.

The fact that the Maple floors in the older part of the school have given most excellent service for many years, was an important factor in the decision of the supervising Engineer to use Maple in the new building. This decision met with the hearty approval of the Architects.

J. A. ARMSTRONG
Armstrong, Furst & Tilton,
Supervising Architects.

outwears stone! Maple, moreover, is exceptionally easy to keep clean. Its smooth surface offers no lodging spaces for dirt and dust.

Consider these advantages of Northern Hard Maple. Consider, too, the fact that it provides firm anchorage for desks and does not interfere with other construction work. Get all the facts about this unique flooring material. Consult your architect.

GOOD SERVICE FINISHES ARE AVAILABLE

—especially adapted to classroom floors of Maple. These finishes seal the surface of hard maple, keep out dirt, resist soil stains and prove non-slippery. They will not mar, scratch or flake off. That's why they are easy to clean and maintain at low cost.

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NOW! Easy, if you use

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—Chicago Medical Society Bulletin,
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Install Crane Safety Fixtures— Praised by Health Authorities

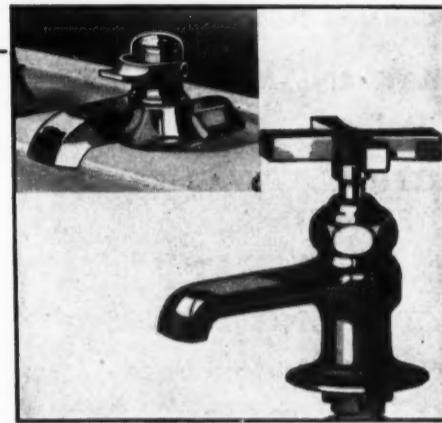
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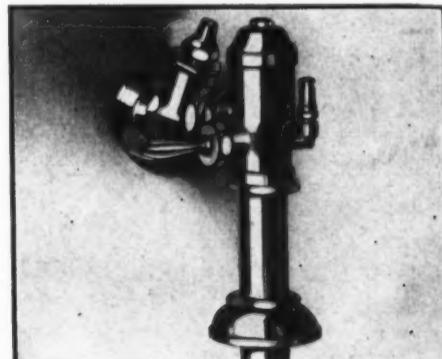
Ask your Crane plumbing contractor to install these safety fixtures!



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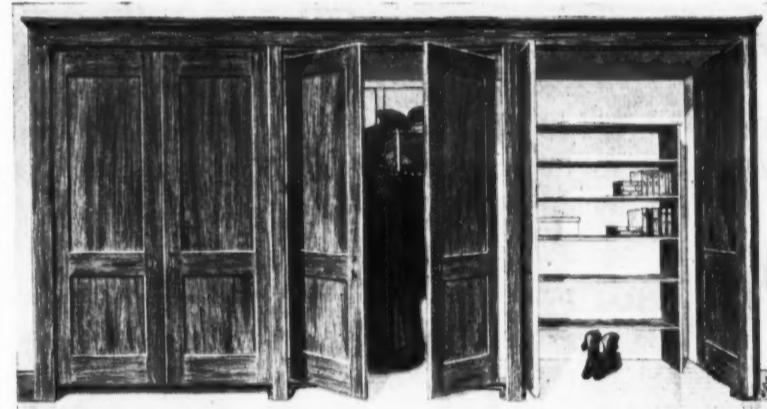
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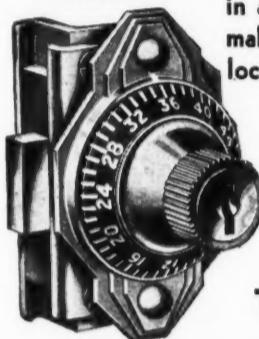
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COMBINATION LOCKER LOCKS

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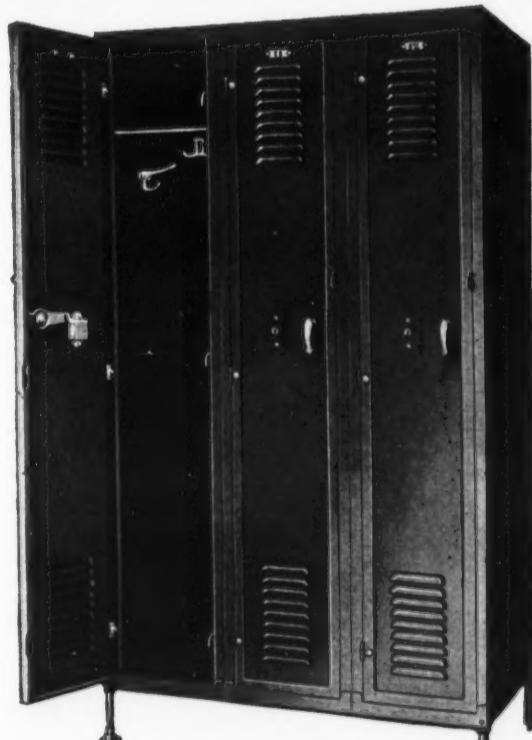
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Many School Districts both large and small have in part made up the salary reductions of the last few years.

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Boards of Education are striving to take care of the older young people who have been eliminated from business and industry through the NRA sixteen year age limit.

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Kindergartens are being reestablished.

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The School Industry is a good criterion for judging and a good barometer for forecasting the pulse of a school community. The School Industry this year denotes a much better school atmosphere than for the past two years.

There is a universal feeling that Education is coming back into its own.

“Education Lifts Its Head”.

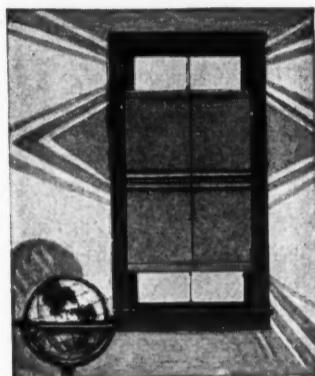
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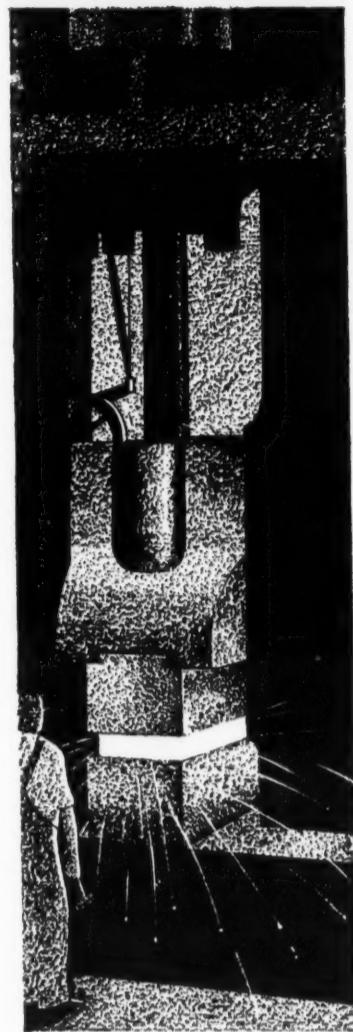
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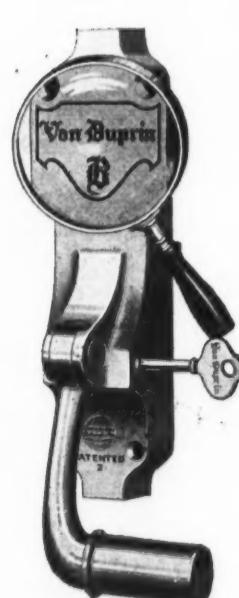
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VOL. 89
No. 6

DECEMBER,
1934

THE AMERICAN School Board Journal

A Periodical of School Administration

Eastern Office:
40 EAST 34TH STREET
NEW YORK, N. Y.

Published on the first day of the month by
THE BRUCE PUBLISHING COMPANY
524-544 No. Milwaukee Street, Milwaukee, Wis.

Western Office:
66 E. SOUTH WATER ST.
CHICAGO, ILL.

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Subscriptions—In the United States and possessions, \$3.00 per year. In Canada, \$3.50. In foreign countries, \$4.00. Single copies, not more than three months old, 35 cents; more than three months old, 50 cents. Sample copies, 35 cents.

Discontinuance—Notice of discontinuance of subscriptions must reach the Publication Office in Milwaukee, at least fifteen days before date of expiration. Notice of changes of address should

What We All Want to Know

THE vitality and recuperative powers of the American people are so strong that any consideration of social and governmental conditions and tendencies at this time must of necessity see the bright side of the year which is coming to a close. It can look forward cheerfully and with assurance that 1935 will see vastly happier conditions.

An impartial review of the school situation warrants this optimistic attitude. There are troubles to be sure, many of them, vexatious, embarrassing, and discouraging. But seeing the picture in its entirety, there is much that is comforting and reassuring.

The schools are, in the main, running at their usual momentum. While capital investments are at a low ebb, except as stimulated by federal support, the credit of most school district and school cities was rarely if ever better. Vast economies have been and are still being effected, but incomes are surer and slightly greater, budgets are amply balanced so that the cost of running the schools is well within the ability of the communities.

The improvement in tax collections is quite evident. Outside the drouth area, the feeling of optimism among school officials is pronounced. The outlook is so reassuring that the salaries are being slightly increased and teaching loads are being reduced. Numerous services that have been curtailed or eliminated are being restored in order that the education program may regain its equilibrium.

The school boards and schoolmen have before them many heavy problems and there will be severe fights with the legislatures to regain and retain a necessary level of educational standards. But life is again flowing, strong and vital, through the educational system, and childhood is being served. And that is what we all want to know.

THE EDITOR.



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Editorial Material—Manuscripts and photographs bearing on school administration, superintendence, school architecture, and related topics are solicited, and will be paid for upon publication. Contributions should be mailed to Milwaukee direct, and should be accompanied by stamps for return, if unavailable. Open letters to the editor must in all cases contain the name and address of the writer, not necessarily for publication, but as evidence of good faith.

The contents of this issue are listed in the *Education Index*. Member, Audit Bureau of Circulation and Associated Business Papers.



FIRE!

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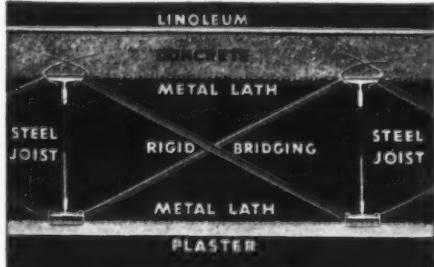
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THE AMERICAN School Board Journal

Volume 89, No. 6

DECEMBER, 1934

Subscription, \$3.00 the Year



GODDESS OF EDUCATION: "Teachers are honored by the requirement to take the Oath; with the added privilege of teaching the supreme importance of loyalty to the constitution from this rostrum."

While Theory Speeds

Ridgley C. Clark, Seymour, Connecticut

There are those who, if told that a theory or a practice is the latest in educational thought or method, readily adopt even the most ephemeral fad. They are unquestioning disciples of the new. There are others whose practice has long been determined. Their ideas are fixed and their methods have been adopted never to be revised. The first class face confusion, the second achieve stagnation.

Between these two extremes we find the great mass of American educators, teachers, supervisors, and administrators. Their minds are alert. They see need of change; they are seeking the right way. They are intelligent and sincere. They feel the burden of the great task which is theirs. They believe that education is a great instrument for the advancement of the race. They are convinced that there should be better ways which will bring more satisfying results. Yet theory travels on at a lively clip while practice lags. New proposals are often greeted with apathy or opposition. Introduction of these proposals into practice is slow. Why? That is the question to which I am trying here to give a partial answer.

Even Progressive is Product of Past

Many times this inertia may be laid at the door of the innovator. Scholars in education, fieldworkers who have seen visions (or think they have), supervisors who seek to awaken the supervised, often fall in the presentation of their ideas. They begin by discrediting past and present practices, the old education. "Present methods," they say, "develop robots, conservatives, criminals, and everything undesirable. Initiative is stifled. Children are ruined by it for life. There is no good in it." The deficiencies of present practices are exaggerated. Teachers know that they themselves are more or less a product of the present or past education. They do not like to think of themselves as robots. They, furthermore, do not believe that the innovator himself, usually a product of the old education, has had his initiative stifled. There is much that is desirable in past and present practice. The past is the foundation of the future. All invention is largely imitation. When men invented the automobile they did not throw away the cartwheel but adopted it, modified, improved it, and made it the basis of their work. When asked to throw away all that they have learned to consider effective, when told that methods they have found workable are all wrong, teachers are at once placed on the defensive. When they appreciate that the new method is a step forward from their present practice, they are ready to accept it, at least tentatively.

Millennium Not in One Advance

People in the field are repelled by extravagant claims for new methods. "This method, if adopted, will bring about the millennium," exclaims one enthusiast. Hard-boiled educators know better. "Heaven is not reached by a single bound." The new methods must prove their worth. Time will test them. New methods are an attempt at a more purposeful, more dynamic, more creative education. The working out of any method is a long process. So great is the teacher's task that whatever method is used he will experience a partial failure. Few are so well satisfied with present results that they do not welcome better methods. They are, however, skeptical of miracles.

Many times new ideas are expressed in such general terms that, unless they are limited and defined they become ridiculous. "The children should always be natural, never artificial," we are told. Now, the natural way to eat is with

the fingers. The natural way to acquire is to make the object desired. Our civilization is artificial; we eat with forks and acquire by buying. The terms need limitation. "Children must enjoy complete freedom. They must choose their work and do it when they please," say some theorists. Here, too, is need for limitation and definition. Teachers must get their reports to the board of education and the state department on a given date. No person is privileged to enjoy complete freedom. With freedom must go a training for responsibility. Obedience is still an important word. Rightly stated and practiced, the idea of natural and free development is a contribution to our educational progress. The more clear the real meaning and limitation of this or any progressive theory is made, the more quickly they will be adopted into practice.

A Wise Teacher's Comment

New methods are experimental. As a young superintendent, I became enthusiastic over a new method of teaching reading to beginners. I obtained a manual which directed each step of the procedure, and took it to a superior teacher of long experience, explained it in as few words as was consistent with clearness, and asked her to study it. She did as I requested. When I asked her if she did not think it an improvement over our present method, she replied: "I guess so. I'll try it anyway. I have tried every method under the sun and the children learn to read in spite of methods." To secure better methods we must undertake much that is experimental. We must do so with full knowledge that some of the new will be preserved and added to our effectiveness either in its present or a different form, and some will be discarded. Some of the old will be restored but some has departed forever.

Sometimes, hastily prepared tests are thrown on the market by assistant professors of education who seek speedy promotion. Sometimes a change in organization is devised and advertised as progressive by publicity-seeking administrators. They may even be sincere in believing that they have made a real contribution to educational progress. Their work is often superficial; it will not stand the test. It tends to retard rather than promote intelligent progress; it tends to create suspicion. One of the most hopeful practices of our time is that of proving new method and material to be used in textbooks in actual practice over a period of years in a limited number of schools before presenting it to the public. With superior teachers, under favorable circumstances, there is less risk involved than in launching them unproved on the public schools of the country. This having been done, they can be undertaken with greater confidence.

Opponents of Indoctrination Indoctrinate

New methods are often undertaken before, rather than after, careful study. Years ago I was impressed with the desirability of student self-government. With a superficial reading on the subject, I undertook to establish it in the high school of which I was then principal. The results were most unfortunate. Democracy soon fell and a dictatorship was established. Student participation in school government is surely practical and desirable, but this or any new method must be studied, carefully planned, and adapted to conditions. New methods adopted before they are understood by supervisors and teachers lead to failure and reaction. The result is that progress is slow.

Many of the new doctrines of psychology and philosophy can be accepted only tentatively and with mental reservations. Only charlatans

claim infallibility. We have been taught that there is no such thing as mental discipline or transfer of training. We have been indoctrinated with the idea that indoctrination is the unpardonable sin. Now it is admitted by many advanced thinkers that mental discipline does have some effect, that there is some transfer of training, and that education is impossible without more or less indoctrination. All honor to the men who have sought the truth and fearlessly revealed the results of their experimentation and careful thought, even to the point of contradiction of their first conclusions. Such integrity gives confidence in their sincerity and leads ultimately to the truth. In the meantime, classroom teachers and supervisors have advanced, changing their practice slowly.

The Cost of the New

Much of the new is contradictory. We have professed that our desire is to teach, not subject matter, but children. The school is for the child. Naturally he is the center of all objectives. Then we devise a series of tests upon subject matter. Teachers naturally desire that the children make a creditable performance. They drill subject matter. It has taken a long time to conciliate progressive theory and progressive practice. Tests have been made and used for diagnostic purposes. They have been made a means of adapting subject matter to the needs of the child. Children are taught in part, at least, through subject matter.

Many new practices involve considerable expense. I was one of a number of superintendents who listened with interest to a description of the work done in a small city, noted for its progressive schools. After the lecture we asked many questions. Finally one man asked, "What is your cost per pupil in average daily attendance?" I do not remember the exact answer but it was a sum well over two hundred dollars. This broke up the meeting. Most of us were lucky if we wheedled eighty dollars per pupil from our watchdogs of the treasury.

Movable seats are required for some of the latest teaching methods. To re-equip a classroom with seats costs considerably; different textbooks are needed; different supplies and equipment are essential. All these things cost money and money is difficult to obtain. The progressive teacher carries on as best she can with present equipment, and the progressive superintendent supplies more modern appliances as he can, but in the meantime progress in practice is retarded while theory speeds.

Is Practice Better?

There is a conservative element in every community which is strictly against any change in education. There is a romance about our school days as we look back on them. They seem about the best years of our life. Even moderately progressive people long to have their children experience the thrill of attendance at the little red schoolhouse which has accumulated a halo with the passing of the years. They resent changes in education as a criticism of their own schooling. Their very consciousness of deficiencies augments this feeling. "Back to the three R's" they cry. Often these people are numerous enough to block advancement and condemn art, music, new subjects, and new methods as fads. Every advancement has had to overcome this feeling.

In spite of frequent denunciations of the schools as static, moss-covered institutions, trailing laggardly behind the progress of the times, I think I am well within the facts when I say that practice in the schools of the country is rapidly progressing toward a better education for the children who attend them. The obstacles which I have enumerated show that this progress is attained only by tactful, courageous, and intelligent leadership. They show the need for careful research, honest reflection, patience, and perseverance in solving problems.

Man's Inhumanity to Man

George E. Carrothers, Director of the Bureau of Co-operation with Educational Institutions, University of Michigan

It has been charged that in certain kinds of public positions it is becoming increasingly necessary to pass to the higher-ups an appreciable per cent of the salary attached to each job. It has even been intimated that in a few communities such "contributions" have been required of teachers. Whether or not that condition existed at one time in the profession, we are confident that it does not exist today. Yet there appears to be developing in the schools another sort of situation, which is becoming just as intolerable: namely, the petty tyranny exercised over teachers by boards of education and certain members of other boards, as well as by some professional administrators. In a day when the number of teaching positions is definitely limited and when it is much more difficult than formerly for members of the profession to find opportunities in other fields of work, it is easy for those in authority to make life all but unbearable for conscientious, hard-working teachers with whom they have little personal contact. Unless thoughtful consideration is given to this situation and to the unusually burdensome conditions under which many teachers are laboring, an irreparable injustice will be done to these teachers and, consequently, to the pupils for whose welfare they are responsible.

Difficulties Confronting Boards of Education

It is fully realized that these are trying times for all, but, even so, consideration for the other fellow ought not be lost to sight. In fact, times are so difficult for boards of education that it is to be doubted whether the average citizen, unless he has had opportunity to obtain first-hand information on their work, can fully comprehend the extent to which perplexing public problems have consumed the time and thought of these busy men and women. These citizens have served all of us well through generous devotion to the interests of our children, and for the most part they have served without salary or other compensation. Many of them, able to command big fees for the kind of service being given from month to month as board members, continue to work without salary to the best of their ability, even in the face of unjust and unwarranted criticism.

It must be recognized, of course, that unexpected changes have precipitated some unusually perplexing problems. For example, property values have decreased tremendously in the past few years. In the State of Michigan alone the assessed valuation dropped from \$8,300,000,000 in 1929 to \$5,800,000,000 in 1933. In one county in this state the value dropped from \$490,000,000 in 1930 to \$217,000,000 in 1933. Since schools are so largely dependent upon property tax for their support, this steep descent in valuation means a greatly decreased income for schools. At the same time, rates of taxation have been greatly reduced. A study of 323 of the smaller districts in Michigan which maintain accredited secondary schools showed a drop in rate of taxation from \$17.47 per one thousand dollars in 1931-32 to \$7.99 in 1933-34, a 54-per-cent decline in the two-year period.

To make matters still more difficult, increased enrollments have been pouring into the schools, thus making necessary enlarged plants, increased equipment, and heavier teacher assignments. Bonded indebtedness has become a

greater burden as larger proportions of school income have had to be used for interest and sinking funds. At the same time, "The New Deal," in its definite attempt to bring a better living to millions of laborers in this country, has increased the cost of living to everyone. Amid all this stress, many of the present school-board members who must help carry the burden of the day are new to their jobs.

Spirit of the Teaching Staff

So far as the writer has been able to observe in his visits to schools throughout Michigan and other states, teachers have held loyally to their work. The school day in 400 of the smaller secondary schools in Michigan has been lengthened from an average of 305 minutes of teaching time to 360 minutes of required time for each teacher in the schoolroom, a 20-percent increase. The number of pupils per teacher and the number of recitations per day have been increased very greatly. Some teachers are handling seven and eight classes each day. At least one teacher in this state is taking care of eight classes in high school per day and is making eight separate preparations—three in English, two in Latin, two in history, and one in geography. Yet teachers have adjusted their lives to meet the new requirements. Very little complaint has been heard on account of what teachers have had to undertake.

During the time that "teaching loads" have been so tremendously increased, salaries have been greatly reduced, and, in a considerable number of instances, it has not been possible to pay the total amounts promised. A study was made of the salaries of the 4,000 teachers in the 192 public North Central secondary schools in Michigan in regard to minimum and maximum salaries, average salary paid to men and average salary paid to women teachers. Figures were combined for items reported for all schools and averages were secured. The following table shows the downward trend in each of the four items reported.

TABLE I. Average Salaries of Teachers in the 192 Michigan Public North Central Secondary Schools

	1930-31	1931-32	1932-33	1933-34	Three-Year Decrease in Per Cents
Minimum	\$1,422	\$1,391	\$1,244	\$ 975	31.4
Maximum	2,577	2,528	2,236	1,770	31.3
To Men	2,092	2,042	1,792	1,447	30.8
To Women	1,752	1,721	1,541	1,227	29.9

These figures are so startling that one wonders, at first glance, whether they can be correct. Since they are correct, and since these 4,000 teachers are the best trained and most widely experienced of the 30,000 teachers in the state, everyone acquainted with the situation appreciates the spirit of loyalty teachers are showing in their work under these trying circumstances.

The indications are that teachers have objected very little to reductions in salary, increased teaching load, and other difficult conditions under which they have to work. Apparently, they have not objected to *what* has been done. In instances where murmuring has developed and complaints have arisen, these have been started by the way matters have been handled.

Objections to Way Affairs Have Been Handled

Even in rural districts where salaries have been reduced to \$30 or \$35 a month, there has been very little carping criticism. This is espe-

cially true where the public and teachers alike have been given all the facts in the situation. In school districts where drastic retrenchments in all lines have been necessary there has usually been shown a fine spirit of co-operation. The places where difficulties have arisen have been those where the teachers have not been permitted to know the facts; or where, knowing the facts, the board has refused to give fair consideration to the teaching force; or where the few "small men," elected to big positions, have taken it upon themselves to "lord it over" their employees. We need to hold clearly in mind that difficulties have grown out of, not so much the thing which *had* to be done, as the *way* it was done. In the treatment of teachers most boards of education have measured up in a magnanimous way, and the majority of members of every board likewise have measured up. A few, however, have so far forgotten themselves that they have stooped to petty tyrannies which have seriously interfered with the morale in the local schools. The inconsiderate treatment of teachers as a special race of inferior beings on the part of a few members of boards of education has left a sting which will not soon cease to smart.

In a certain small city in a western state the board of education found it necessary to reduce salaries rather drastically. This "cut" was accepted with good grace by the teachers, and their work continued on a high plane. A year later another reduction was made, and later in the year a third reduction. After the vote for retrenchment was taken at the third session, one member of the board remarked, "Well, I guess that'll hold the teachers and put them in their place." Another member echoed his sentiment, and no one in the group had the grace to object to the inconsiderate spirit displayed. When these remarks were later reported to the teachers, the taunt was almost more than they could bear. The two members appeared to act as if they had been commissioned to add a few extra "wallops," just to show their superiority and their contempt for the species. And through it all never a word from the superintendent, who supposedly attended these meetings as the friend of the classroom teacher.

A Minority's Work

In one community in a neighboring state the president of the board of education permitted two members of the five-member board to run away with affairs. These two members, elected by a noisy faction, proceeded to go even further in the retrenchment than their most ardent supporters ever expected. At the same time, and as the feeling of importance in their positions grew, they proceeded to criticize openly and caustically the superintendent of schools and the whole teaching force. Finally, the other two men, disgusted with the undignified procedure and the resultant newspaper reports, resigned. That was what these two men wanted. The remaining members elected men of their own kind to fill the vacancies, and from that day forward they ruled school affairs with dictatorial powers. The superintendent was discharged in short order; and a man more amenable to their desires was employed, at the largest salary the city had ever paid, even though the incoming superintendent had never before drawn more than one-fourth that amount. Before long there was a complete hiatus between the board members and the staff

of teachers. The wounds then opened will not be healed in many years to come.

As I write these words, there comes to my desk a letter from a splendid business man telling me of the brow-beating attitude of certain fellow members of the board of education in his district. He asks whether, in my opinion, he and one other man should resign. My reply has gone back immediately, "Don't resign! Hold the fort!" An old philosopher farmer on the Kankakee River for whom I worked one summer used to say, "When you are in a bad situation, make the best of it. Don't make the worst of it." If these men resign, they will only make a bad situation worse. If they hold on and try to deal quietly and thoughtfully with their fellow members and the public, teachers will be happier, better schools will be provided, better work will be accomplished, and, in the end, as other elections come, better men and women will be elected to the board. In the case of the city mentioned in the previous paragraph, the chances are that the two members who became disgusted might have changed the whole intolerable situation, if outside of board meetings, they had worked thoughtfully with the man who had been elected president. He appeared to be a good man at heart, interested in the schools, the pupils, and the teachers. He might have been helped to see that in his indecision he was actually turning school affairs over to selfish interests and that he was being made a reproach to the community. His presidential backbone might have been stiffened a little with considerate, thoughtful treatment and the situation saved for right and decency. The sting of inferiority which was left with some of the teachers need never have been inflicted, if these two fine citizens could have seen their way clear to a little more fighting for the right in the face of ignorant opposition.

Why Not Share Alike?

One board of education, finding itself in difficulties in the fall of the year, voted to meet obligations then due their creditors and to contract with teachers for only as large salaries as the funds then available would warrant. It was further agreed that any additional incoming funds would be used to increase salaries and to pay interest and sinking funds in proportion and to the limit of monies available. Bondholders and teachers were to share alike. Even though salaries were low, the teachers appeared to accept the situation with good will. When funds came in during the year, insistent bankers and bondholders prevailed on the board to pay them immediately in full. Teachers were left to accept what remained, even though this was a very small amount. The open hostility which developed in that town, as a result of the way matters were handled by the board of education, seriously interfered with good schoolwork and in turn harmed even the children of the members.

All of us have faced difficult and trying times these past few years. Not even the so-called wealthy have been sure of their incomes. Many of them have had to meet perplexing financial problems. Suffering on account of financial reverses has touched not only the indolent few — it has touched all of us. But the anguish and pinching of the difficult circumstances in families, in business, in schools, and in communities have been relieved where men have been men, and where men and women have stood together facing problems in an understanding, sympathetic manner. The hurt has come when indignity and insult have been added to the financial burden.

In one district, known to the writer, it was necessary to reduce salaries and possibly neces-



MEMBERS OF THE OXNARD UNION HIGH SCHOOL BOARD, OXNARD, CALIFORNIA
(1) Mr. B. F. Barr, clerk, 24 years' service; (2) Mr. J. D. McGrath, 24 years' service; (3) Dr. H. M. Staire, president, 19 years' service; (4) Mr. P. W. Dennis, 12 years' service; (5) Mr. F. M. Aggen, 8 years' service.

AN EXCEPTIONAL RECORD OF SERVICE

The tenure of the members of the board of education of Oxnard, California, Union High School District, is exceptional. Its five members represent a combined service of 87 years.

They were chosen, from time to time, without contest and performed the task assigned to them with fidelity and a conscious adherence to duty. They are all ranchers, with the exception of one member, who is a dentist. The public appreciates the fact that men of their high standing make the sacrifice of time and effort to secure an efficient administration of the twelve elementary schools and one high school scattered over a district covering a territory of about 15 by 30 miles.

The members of the board who have rendered continuous service are as follows: B. F. Barr, 24 years; J. D. McGrath, 24 years; Dr. H. M. Staire, 19 years; P. W. Dennis, 12 years; F. M. Aggen, 8 years. W. D. Bannister, the principal, has served for a period of 19 years.

sary to make what the board called temporary, month-to-month contracts. It was not necessary, though, to ask the teachers to visit the members of the teachers' committee of the board of education each month and beg that their jobs be continued. It may have been necessary to see that the district did not go into debt by the end of the year, although this is doubted, but it was *not* necessary for teachers to be humiliated by making them wear paths each month to the places of business of these three men in order that they might be firmly impressed with the special favors being conferred on them by members of the board.

Despite the fact that those fifteen or sixteen teachers were among the most respected citizens of the community, despite the fact that they were well educated and experienced, and despite the further fact that they were active in all public affairs which help to make a cultured, satisfying community, some of them were made to wait as long as two hours on the occasion of these visits before the "busy" business men could see them. One splendid, refined woman 40 years of age, an experienced teacher of English who had so deeply invested in her education that she was a considerable distance beyond her master's degree and who was earnestly trying to make a home for three younger

brothers and sisters, the mother and father being dead, was made to sit for almost two hours on a broken-down chair in a shoe-repair shop until the proprietor finally found time to inform her of the conditions on which her contract might be renewed for January of that year. The woman had accepted drastic reductions in a fine spirit, and had cheerfully continued her work in the school and the community, but the humility of going once a month to beg for a job was almost more than her sensitive nature could stand. But she had to have the job. The small salary enabled her to keep the family together and to provide education for the younger members who must get an education at that time, if ever. A visit to the classes of that teacher, soon after one of the trips to the school committee, convinced me that the quality of her work had been seriously lowered. The unconcern of the superintendent who had been employed to help and to protect her, and the self-asserted importance of the three members of the board who got themselves appointed as the teachers' committee, were rapidly breaking the spirit of this devoted teacher. A little more thoughtful courtesy on the part of the superintendent and the other six members might have saved the situation with this splendid woman and with all of the other teachers. It is not so much that men wish to be inconsiderate of their fellow men, as that the thoughtlessness of a few brings tragedies to all.

A Suggested Policy

Youth dream dreams of the great things they will some day accomplish. Some do go on to large places of influence and power and usefulness, and thus find their dreams coming true. A large proportion, however, must, of necessity, fill the smaller places in the world since there are so many of these to be occupied. Many a man running a garage recalls the dream of the great engineering firm he would one day manage. Other good citizens look back to the time when they, too, planned their life's affairs in large ways. But each morning the fulfillment of the dream is pushed a little farther out on the horizon as the rou-

(Concluded on Page 65)

The Essay Type of Examination

George Meyer, Ph.D., Psychological Laboratory, University of Michigan

For the past decade the essay type of examination has been in disrepute. From being practically the only type of examination used in the schools, it has been largely replaced by the so-called objective or new type of examination. The reasons for this replacement are well known. All experimental studies evaluating the two kinds of tests have found the objective tests superior to the essay tests as instruments of measurement. Some of the major advantages of these new types of examination which have been found are: objectivity of the scoring; economy of scoring; higher reliability per unit of working time; more extensive sampling of the subject; and greater control of the examination system by the teacher. That these are distinct merits of the objective tests cannot be doubted, and, if in the school situation, one were interested in tests merely as measuring instruments one would, on the basis of these advantages, be entirely justified in using objective tests exclusively.

The Test's Influence on Learning Process

However, a test cannot be considered merely as a measuring device insofar as the school is concerned. A test is much more than that — it is something which may influence the whole learning process. Despite the fact that almost all educators would agree to this, only recently has anyone attempted to evaluate the old- and new-type tests on any basis other than as a measuring instrument. Yet it would seem that to educators the important issue, so far as the comparative value of these types of tests is concerned, would lie not in the tests as tests, but in the influence of tests on learning.

Although almost everyone would agree that one studies differently for a true-false test than for a completion test, and differently for a completion than for an essay test, and so on, on the basis of the experimental data at hand it is as yet too early to make a very complete evaluation of the essay compared with the objective tests on the basis of the effects on learning. However, the data which are available show some very definite tendencies. The experimental results of investigations on the methods of study used in preparing for various types of examinations are very much to the point.

Crawford has published a list of aids¹ for preparing for objective tests which was derived from questioning thirty graduate students. This list might be considered a condemnation of the objective tests. Take, for example, the following aids: One should study by extensive methods instead of or in addition to intensive methods. "This fact suggests the wisdom of being acquainted with a large number of aspects of the subject or course, even if lightly and superficially." Another, one should review for the test by skimming over the high points. Third, one should watch for key words, dates, proper names, and other concrete, factual, or objective items. Fourth, one should study the individual instructor's peculiarities and testing habits. Such items as these would seem to indicate that it is not the learning of the material studied that is important but rather the learning of how to pass a test.

Effects of Studying for New Tests

Terry,² Douglass and Talmadge,³ and the

¹Crawford, C. C., "How to Study for Objective Tests," *Education* (1929), 53, 602-609.

²Terry, P. W., "How Students Study for Objective and Essay Tests," *Elementary School Journal* (1932-33), 33, 592-603.

³Douglass, H. R. and Talmadge, M., "How University Students Prepare for New Types of Examinations," *School and Society* (1934), 39, 318-320.

writer⁴ have studied the relationship of study habits or methods to the type of questions used in examinations. Terry found that in general when students review for essay tests "they look for the main points and endeavor to strengthen their grasp of the subject matter in large units taken as wholes. In reviewing for objective tests, on the contrary, they look for details and work with small units." Douglass and Talmadge besides reporting the same general finding also report that students preparing for an objective test pay little attention to formulating personal opinions, whereas students preparing for an essay test attempt to know what they think about the content of the material studied, and to formulate a personal opinion. In the investigation made by the writer, the same tendencies were indicated.

The writer, besides studying the methods used during learning by a questionnaire method such as was used by the previous investigators, made an analysis of the methods actually used in learning several chapters of historical material. In other words, an actual check was made of the students' reports as to how they studied. In this analysis it was found that besides mere reading of the material to be learned, six methods of study were used in varying combinations and numbers by the individuals preparing for different types of examinations. These six methods were: (1) the underlining of words, phrases, and sentences in the learning material; (2) the listing of names, places, dates, and numbers; (3) the taking of random notes; that is, notes which had no organization but were more than mere listings; (4) the making of summaries in paragraph form; (5) the drawing of maps; and (6) the framing of practice test questions.

With regard to the number of methods used other than mere reading of the material, it was found that in general, more methods were used by the individuals studying for the essay type of examination than by those studying for a completion, multiple-choice, or true-false examination. With respect to this matter, the individuals who prepared for a true-false test were poorest, approximately one third of the individuals doing nothing but reading the material; whereas only about 10 per cent of the individuals preparing for each of the other types of tests used this method only. This would seem to indicate that individuals preparing for an essay examination do more active learning than individuals preparing for an objective test.

With respect to the specific methods of study used it was found that a greater percentage of individuals preparing for an essay examination made summaries and maps than in the case of the individuals preparing for any of the three types of objective test. On the other hand, a smaller percentage of individuals in the essay group used underlining as a method of study than in any of the other three groups. The foregoing were the outstanding differences in the methods of study between the individuals preparing for an essay test and the individuals preparing for an objective test, although other differences were present. Such results indicate that the differences found in the questionnaire investigations are true ones. The use of such methods of study as the making of summaries and the drawing of maps would seem suitable for giving one a general grasp of the material, whereas the use of such a method as underlining of words and phrases would seem appro-

priate for giving one some knowledge of isolated details in the material.

Method Determines What is Learned

It has been demonstrated by the writer that these differences in methods actually play a large part in determining what is learned and what is remembered after a certain interval of time. The subjects of the experiment were divided into four groups; each of which studied for a different type of test (essay, completion, multiple-choice, or true-false). Each group spent the same amount of time in preparation. When tested with all four types of tests one day after their last learning period and then again five weeks later, some rather important differences were evident among the groups. On the first recognition tests (true-false and multiple-choice) all four groups did about equally well. On the second recognition tests which came five weeks later, the individuals who had prepared for a recall type of examination (completion or essay) were definitely superior to the individuals who had prepared for the recognition types of examination. In the case of the completion test the group which had prepared for that type of test was superior to the other three groups on both the first and second tests. In the case of the essay test, the group which had prepared for that type of test was superior to the other three groups on both the first and second tests, both when the tests were scored for the facts which they contained and when they were rated for the organization of the material presented.

The foregoing results seem to indicate that, when equal amounts of time are spent in preparing for an examination, it is more economical to spend one's time preparing for a recall type of examination because the preparation for that type of examination gives one a more complete mastery of the material as measured either in terms of recognition or recall. If this is true, then the constant use of recognition types of objective examinations in the school situation is a bad practice, as students under such a condition will not use the most economical methods of study. Thus, teachers who give recognition tests exclusively are not obtaining the most economical learning, for students come to expect these types of tests and hence prepare merely for them. Students in the classes of such teachers no doubt are penalized as to what they learn, as compared with students in classes where recall tests are used, or where the testing program is so varied that the students do not prepare for recognition tests only.

It seems to the writer that recognition types of questions should only be used under the following conditions: (1) when recognition questions form only a part of the examination; (2) when the type of examination to be given is unknown to the student; and (3) when the teacher feels that the material being tested is not of sufficient importance to warrant its being learned for more than immediate recognition. In other words, recognition tests should not be given indiscriminately. The teacher must decide what material should be learned merely for immediate recognition, and what material should be learned so that it can be recognized and recalled for as long a time as possible.

Not only do differences exist between the recall and recognition groups, but also between the two recall groups as has been pointed out. These differences indicate that preparation for a completion test is most economical when all that the teacher desires is that the student re-

⁴Unpublished Ph.D. Thesis, University of Michigan.

call isolated facts when the essential cues related to those facts are given. However, if the teacher desires that the learned material be recalled with a certain organization and without having cues for every detail supplied by the examiner, then preparation for an essay type of examination is superior. Certainly in every school subject there are portions of the material which the student should be able to recall in organized fashion, and where the material should be well enough learned so that the students do not need cues in order to recall it. Where such is the case the student's preparation should be for an essay examination. Here again it is the teacher who must make the decision as to whether the materials studied need only to be recalled as isolated facts, or whether they should be organized; as to whether the materials need only be recalled when cues are given, or whether they should be recalled when no suggestion of the answer is given.

In Conclusion

To summarize, it seems to the writer on the basis of the data which have been presented that, despite the fact that as a measuring instrument it is poorer than objective types of examinations, the essay type of test has certain advantages over those type of tests insofar as the learning situation is concerned. Essay tests stimulate the student to a different type of preparation from objective tests. Not only is the preparation more active from the point of view of the number of methods of study used, but these methods lead to an organization of the materials being studied. These differences in the number and kinds of methods of study, as one would expect, determine what the student learns and remembers over a certain period of time. For recall where cues to the answer desired are not given and for recall where organization of the materials is important, preparation for an essay test is more economical than preparation for a completion test.

However, preparation for a completion test is most economical when all that is desired is the recall of isolated facts when cues to the answer are given. Preparation for either a completion or an essay test, on the other hand, is more economical than the preparation for either a true-false or multiple-choice test. Preparation for either type of recall test is superior for ultimate recognition of the materials, and for immediate and delayed recall of the completion or essay type.

Thus, in general the essay type of examination results in a superior type of preparation and more adequate learning and recall than the true-false, multiple-choice, or completion types of examination. For these reasons it would seem that the current practice of giving objective tests almost to the exclusion of essay tests should be modified.

Library Service in the Pasadena School System

V. Cabalin, Pasadena, California

The Pasadena school library system combines both the centralized and the decentralized plans of operation. Each division of secondary education through the junior high schools, of which there are several, the high school, and the junior college, has its own complete library set-up and program, and a central library, known as the City Schools Library, is maintained to serve the elementary schools of the city.

There is a School Library Association of which each librarian in the system automatically becomes a member. While each library is an independent unit, standard policies are adopted by this association, which makes the work uniform. All problems are threshed out in regular scheduled meetings.

Then each school in the division of secondary education has its own library committee, usually consisting of the librarian, the principal, or vice principal, and one or two teachers or department heads, appointed by the administration.

1928-29	28477.51	8223.87	32730.55	5012.04	\$ 74843.97
1929-30	27199.09	12480.50	34536.19	5436.17	\$ 79661.95
1930-31	27501.73	12232.93	34329.30	6337.36	\$ 80401.32
1931-32	31279.79	7179.00	36400.86	5735.54	\$ 80595.23
1932-33	29606.69	6947.70	4670.79	3647.65	\$ 54872.83
1933-34	30582.97	7333.08	16796.41	4964.64	\$ 59677.10

■ Salaries ■ Library Books ■ Supplementary & Textbooks ■ Miscellaneous

COST DISTRIBUTION OF SCHOOL-LIBRARY SERVICE IN PASADENA, CALIFORNIA

The library committee for each school in the division of secondary education, and for the central library, makes up a tentative budget annually for the individual libraries. This tentative budget is passed on by the school principal, and in the case of the central library by the librarian, to the superintendent, Mr. John

A. Sexson. The complete school-libraries budget is then made up and presented to the board of education. After consideration by the board it is returned to the superintendent, with the acceptance of the board.

Book budgets are based on the average daily attendance for each school. And each school library committee makes its own selection of books. In the elementary division, the maximum and minimum amounts to be spent for books is regulated by law in the State of California. While in times of prosperity appropriations are likely to be nearer the maximum, in times of depression they cannot go below the minimum.

In the central library serving the elementary schools, there are approximately 90,000 volumes, two thirds of which are in circulation all the time. The staff here consists of the librarian, two clerks, and student help.

Teachers in the elementary grades visit this library and make their own selection of books. There is weekly delivery service to each school. For the elementary-school students, the teacher orders a sufficient number of the same title to supply the class.

Before leaving for the summer vacation, teachers request the books they will need for the first week of school. This year over 25,000 volumes were delivered to the elementary schools and ready for use on the first day of school.

Each room of the three hundred odd which comprise the elementary grades has its own book table, at which boys and girls have free access to supplementary books selected by the teacher at the central library, to motivate and enliven interest in the activity then under way in the class.

The central library also supplies for the use of parents as well as teachers, lists of books suitable for children in the different grades.



THE LIBRARY TABLE IS A FEATURE OF PRIMARY CLASSROOMS IN THE PASADENA SCHOOLS
Proper reading habits are early established through the use of well-selected reading materials and careful guidance in reading.

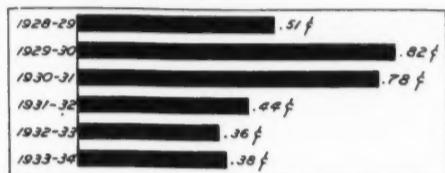
Some of these lists carry as many as one hundred titles, and all carry a wide variety of suggestions for supplementary reading.

Another feature of this library is a good display of standard reference works, suitable for use in connection with elementary schoolwork where parents considering the purchase of books of this kind may browse, or consult with the librarian if they so desire.

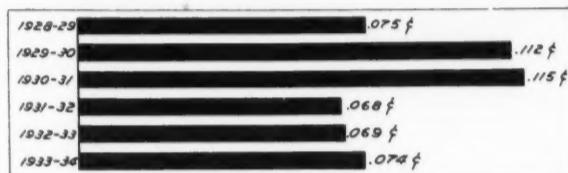
At a convenient location a section is devoted to the display of publishers' samples of books which are under consideration for purchase by the library. For one reason or another the purchase of desirable volumes is sometimes considerably delayed. A card index of these volumes is also kept. As soon as a book is scheduled for purchase, and the requisition made out, the volume is removed from this display, and the card from the file.

Requisitions for books to be purchased go to the purchasing department of the city schools. Here orders are assembled into lots and bids obtained on purchases over a certain amount.

Before going to the purchasing department, however, all book orders and indeed all library requisitions must be approved by the business assistant of the administrative staff. In this way strict budget control is maintained.



ANNUAL COST OF LIBRARY BOOKS PER CHILD IN DAILY ATTENDANCE



ANNUAL COST OF LIBRARY-OFFICE SUPPLIES PER CHILD ADA.



THE LIBRARY IN THE JOHN MUIR TECHNICAL HIGH SCHOOL, PASADENA, CALIFORNIA, is in a very real sense a place for work and for the quiet enjoyment of reading. The library includes over 7,000 volumes for the use of the enrollment of 1,200 students.

As to the cost of the Pasadena city schools libraries —

The Chinese have a proverb that one picture is worth ten thousand words. The graphic charts accompanying this article show the costs of the city schools libraries over a period of six years and really tell the whole story from the financial angle.

Reorganization of the Lexington, Kentucky, Teachers' Pension Fund

Prof. Edgar Y. Palmer, University of Kentucky

The Kentucky legislature in 1914 passed a statute permitting second-class cities in the state — of which Lexington is one — to set up "insurance and annuity" funds for the public-school teachers. The organization, rate of contribution, and benefit of such a fund were all specifically determined by the act. Lexington elected to take advantage of this privilege almost immediately and her fund began operation with the school year 1915-16. The principal of the Lexington fund thereupon began a steady growth until in 1931 it had reached the amount of \$178,000. In the meantime several unimportant amendments had been made to the law, and a state fund, which was open to any school district in the state, and into which existing city funds could be merged, was theoretically set up by a statute of 1928. This state fund never materialized into fact. Finally, the state-wide school code passed in 1934 repealed the whole of the old law on this subject, and allowed first- and second-class cities to establish new teachers' pension funds with a much broader range of discretion over the specific provisions of contribution and benefit. The Lexington fund has accordingly been overhauled and established upon what is thought to be a sound basis.

The original act of 1914 gave the following four sources of the fund: The sum of \$1,000 a year was to be provided by the board of education, out of funds coming into the board's hands for the maintenance of the schools. Then the city commissioners were to levy a tax of 1 cent on every \$100 worth of taxable property in the city. The teachers' contributions were

to consist of 1 per cent of the salaries of all who had taught in the city for 10 years and under, and 2 per cent of the salary of all who had taught in the city longer than 10 years. Interest, donations, etc., were, of course, receivable to swell the fund.

Too Liberal Provisions

The benefits as laid down in the 1914 law were available to any teacher who should retire after 25 years' service, and amounted to 30 per cent of her salary, plus 2 per cent for every year more than 25 which she had served, to a maximum of 50 per cent. Thus if she retired after 30 years, her pension was 40 per cent; or if after 35 or more years, 50 per cent. No pension could be over \$800 a year, however, except that by special action this might be increased to \$1,200.

The disability provisions of the act were even more liberal, allowing a retirement upon certification of disability after only 15 years of service. The pension in this case was to be the same fraction of the maximum 50 per cent, as the teacher's time of service was of 35 years. The disability pension, aside from the fact that it could begin 10 years earlier, was greater than the ordinary pension. After a service of 25 years, for instance, the disability pension would be slightly over 35 per cent, against an ordinary pension of 30 per cent. When the maximum was reached at 50 per cent the two types of pension were equal.

That these benefits were far too liberal to be supported by the stipulated contributions does not need complicated actuarial mathematics to

prove. A teacher has, after 25 years of service, paid in a total of 40 per cent of her annual salary. This would have been about doubled by the contributions from the school board and the city, and doubled again by the interest, giving a total reserve of 160 per cent of her annual salary with which to purchase an annuity of 30 per cent. If she had entered the school system at the age of 20, she could retire at 45, so that the pension might be payable for 30 years or more. No fund could last long with such provisions as this.

Future Bankruptcy Certain

In giving credit for school service, time served outside of the city could be counted, except the last 15 years before retirement. During any service outside the city, of course, the teacher would not have been making contributions to the fund. In the case of a disability, only 10 years of the credited service need have been spent in the city which was to pay the pension.

After retirement, there was but one limitation upon the former teacher's activities. Retiring at the age of 45 or more, she might earn a good living at any occupation except that of public-school teacher, and enjoy her pension as well. She might even teach in a private school. This applied to a teacher retired upon a disability allowance as well as to others.

An investigation into the adequacy of the fund, made in 1931 — which paved the way for the new pension provisions in the school code and for the reorganization of the fund — showed that the teachers had actually entered

the service, as a rule, between 20 and 30 years of age, so that the majority of them would be eligible to retire between 45 and 55 years of age, without even using the disability provisions. The retirements which had taken place were at an average of 62 years of age. Those who had not retired until they reached the maximum teaching age of 70 were balanced by others who had retired in their fifties.

Study Leads to New Plan

An attempt was made to predict the future of the Lexington fund, at least for the next 10 years. This was not an easy nor a satisfactory task, because of the number of variables involved. The number of teachers who might be expected to be contributing to the fund would vary with the school population of the city, the capacity of the school buildings, the expansion of the city limits, and the financial exigencies of the school system. The average salary of the teachers, upon which was based both the contributions to, and the benefits from, the fund, would be affected by many factors. On the side of the city's contribution, the variables were even more numerous since the 1-cent tax on the property depended for its amount on the assessed valuation in the city.

To predict the retirement of teachers at age 70 was comparatively easy, given the present age of each. But to predict retirements at the option of the teacher, anywhere from those occurring after 25 years of service to those occurring at age 70, was pure guesswork. It was found that the teachers eligible to retire in 1931 could, if they should do so in a body, drain \$35,000 a year from a fund whose principal amounted only to about five times that sum, and whose annual income from the city, the teachers, and interest was about \$23,000. On the assumption, however, that the retirements would occur at about the same ages and lengths of service as in the past, it was evident that the payments from the fund would become greater than the receipts in or before the year 1940, and that the principal of the fund would then begin to decrease.

Some Variables in the Problem

The causes of this condition were (1) the inadequate contribution scheme and (2) the fact that the fund started in 1915 with a liability toward all teachers then in service, based on their years in the school system during which the fund had not been in existence and no contributions had been collected. The first of these would have wrecked the fund even though it had not had the additional burden of the older teachers to carry. It was the second, however, which made the burden pressing at this time. In the installation of every pension scheme, consideration should be given to the problem of those already nearing the retirement age. Are they to be given the benefit of their years of service, during which they have made no contribution to the fund? If so, then an adequate reserve should be set up to cover this liability. Otherwise the fund becomes merely a device whereby the younger teachers subsidize the retirement of the older, with the virtual certainty that when they in turn become old enough to retire, the fund will be exhausted and they will not benefit.

The total reserve, on an actuarial basis, which the fund should have had in 1931, was \$900,000, as compared with an actual reserve of less than \$200,000. Of this total required reserve, \$200,000 was needed to cover the liability for those who were credited with years of service without contributions before 1915. Somewhat less than \$100,000 was for pensions already granted. The rest, about \$600,000, reflected the general inadequacy of the contribution scheme as compared with the benefits promised. This is based on the 25-year retire-

ment privilege. If, in fact, retirements might be expected to occur at the age of 70 only, then such a large reserve would not be needed, and the fund might almost have been considered sound.

Principles Underlying New Plan

The pension provisions for second-class cities, in the new school code of 1934, imposed only very general restrictions on the scheme of contributions and benefits. The special contribution from the board of education of \$1,000 a year was abolished, and the total of the city's contribution cannot exceed a tax rate of 4 cents. The city's contribution must be at least equal to that of the members of the retirement system. The membership was permitted to include all employees of the school system, such as janitors and clerks as well as teachers. Much was said in the new act about adequate reserves, actuarially sound contribution and benefit schemes, periodic examination, and the employment of an expert adviser, but little specific direction was given. The board of education of Lexington was thus left free to develop its own plan.

The plan as immediately worked out and put into effect is based on these general principles:

1. The fund is still to be treated as a group enterprise rather than as a set of individual savings accounts. The latter method, often recommended by organizers of such funds, involves an unnecessary amount of bookkeeping, and obscures the real nature of the fund, which is and must be affected by general risks. To give to a teacher on retirement the annuity representing the "exact actuarial equivalent" of her contributions, plus a given proportion for the city's share, is not a transfer of value—it is a promise involving risk to the entire fund. Standardization of contributions and benefits on sound actuarial principles is considered to be a better method.

2. The membership of the system was expanded to include janitors, clerks, and other full-time employees of the school system. None of these new members, however, will be credited with any years of service previous to the present. In the working out of janitors' contributions and benefits several interesting problems were met, such as the case of janitors whose salaries are purposely large enough for them to pay an assistant of their own choosing. This problem has not yet been solved.

Teachers' Contributions Modified

3. An age basis for the amount of the teacher's contribution has been adopted, to replace the former service basis. Instead of a teacher paying 1 per cent of her salary for the first 10 years of service, and 2 per cent afterward, she now will pay 1 per cent until she reaches the age of 30, thereafter 2 per cent until she is 40, and then 3 per cent. It is the young teachers who have the least at stake in a pension fund, who are most likely to leave the system before their time for retirement, who are most likely to be exploited by an insolvent fund, and who, therefore, should pay the least. The city's contribution was increased by the board of education from a flat \$1,000 plus a property tax of 1 cent to a total tax of 2 cents.

4. An age basis was substituted for a service basis in the granting and calculation of benefits. Instead of a retirement after 25 years of service, with maximum benefits after 35 years, retirement was allowed on an annuity at age 60, with maximum benefits at age 70. Disability retirement was granted beginning with age 50. There is nothing about 25 years of service which should entitle or oblige a teacher to retire. At 45 a teacher who began her career at 20 is just beginning to be valuable to herself, her pupils, and the school system—provided, of course, that she has kept up with her studies of modern

methods as she is encouraged to do by Kentucky law and Lexington policy. It is the teacher made infirm by advancing age who in justice to herself and to others should be given a way to retire. To some this time comes at three-score years, and for some it may be postponed to three-score and ten, or a little beyond. Some option is needed.

Fairness and Soundness Sought

5. In the computation of benefits payable, a careful statistical and actuarial basis was laid, based on many factors involved. Too often "actuarial" computations involve a slavish adherence to a table of mortality. The actuarial expert forgets that he is but a specialized statistician who is to make a forecast. A table or rather several tables need to be consulted and used, but a pension scheme is not necessarily sound when based on a good table. The number of individuals insured by a fund, for instance, is an important variable neglected by the tables. Some small life-insurance companies often go for a year or more without a single death among their policyholders. A small fund like the one here considered must expect considerable variation from tabular results, and the contribution and benefit set-up must allow for this.

6. A fairer distribution of benefits was sought. Under the older plan, a teacher who retired after 25 years of service, say at age 50, received an annuity worth very much more, considering the payment she had made, than one who retired at age 70. In the new plan the present value of an annuity received by one who elects to retire at age 60 is approximately equal to that of one who waits for 10 more years. Since the annuitant of 60 will live more than twice as long, on the average, than the annuitant of 70, the annual payment is cut down accordingly. The scheme used is to pay those who retire at 60, one half of 1 per cent of their salaries, multiplied by the number of annual contributions they have made to the fund. This percentage is increased by regular yearly steps up to 1 per cent—still multiplied by the number of contributions—for those retiring at 70. Thus a member of the system who enters service at 20 and serves 50 years receives the maximum annuity of 50 per cent. Had she retired at age 60 she would have received only 20 per cent (one half of 1 per cent, multiplied by forty years' service).

The Present Pension Allowances

7. It was not considered practicable to withhold credit for service before 1915, even though no contributions had been made before that year. In view, however, of the extra burden of these older teachers, which will be a drain on the fund for many years to come, it was decided to impose an additional contribution upon them. They pay an additional quarter of 1 per cent of their salaries annually for every 5 years or fraction thereof which they served before 1915, to a maximum, including their regular contribution of 4 per cent.

8. The maximum benefit, both for new and old pensioners, was reduced from \$800 to \$600 per year. There was no other change made in pensions already granted, which total about \$12,000 annually. It was stipulated that every salary over \$2,000 per year would be treated, both in calculating contributions and benefits, as though it were \$2,000. It is hoped that in the future, when the burden of the older teachers has somewhat lessened, that the maximum of \$600 per annuity can be abolished. In that event, this other provision would operate to place the maximum at \$1,000, or 50 per cent of a \$2,000 salary.

The increased contributions both from the city and the teachers should increase the present annual receipts of the fund, to a total of over

(Concluded on Page 65)

Types of Six-Year High Schools

L. R. Kilzer, Professor of Secondary Education, University of Wyoming

The movement for the reorganization of the American public-school system has produced a variety of special types of groupings. The abandonment of the traditional 8-4 system has usually resulted in the downward extension of the secondary school to include what were formerly the seventh and eighth grades of the elementary school. The reorganized twelve-grade system has, therefore, ordinarily devoted six years to elementary education and six years to secondary education. Under this plan the secondary division has consisted of (1) two distinctly separate units of varying numbers of grades—the junior high school and the senior high school; (2) two closely connected units of varying numbers of grades—a six-year high school of the junior-senior type; or (3) a single six-year unit—the undivided six-year high school.

The organization which provides a junior high school and a senior high school is often confused with one which provides a six-year high school. An attempt should be made to distinguish as clearly as possible. The Department of Superintendence¹ in 1927 indicated several characteristics of the junior high school; among them are the following: (1) it is that part of the public-school system above the sixth elementary grade, including usually grades 7, 8, and 9, or at least two of these grades; (2) it has a separate building in which to house these grades; and (3) it has a separate staff of teachers for these grades. The recent National Survey of Secondary Education recognized also a four-year junior high school incorporating grades 7, 8, 9, and 10. It is apparent that there is lack of agreement in regard to just what a junior high school is. Many so-called junior high schools are really not junior high schools at all.

A senior high school is part of a reorganized school system which also provides a junior high school. If the junior high school in a twelve-grade system incorporates grades 7, 8, and 9, the senior high school incorporates grades 10, 11, and 12; and if the junior high school in such a system incorporates only grades 7 and 8, the senior high school incorporates grades 9, 10, 11, and 12. Approximately three fourths of the present junior high schools include grades 7, 8, and 9, and approximately three fourths of the present senior high schools include only grades 10, 11, and 12. The upper four grades in 8-4 and 7-4 systems are high schools—not senior high schools.

The Three Types

Six-year high schools are of three types: (1) the undivided six-year high school; (2) the junior-senior high school composed of two closely connected units of three years each; and (3) the junior-senior high school composed of two closely connected units of two and four grades.

The Undivided Six-Year High School. This type of high school has the following characteristics:

1. It incorporates grades 7 to 12, inclusive, as a single unit.
2. The principal and each of the assistant principals (if there are assistant principals) are each responsible for duties throughout these six grades.
3. Advisory officers, departmental heads, and teachers are responsible for assignments at any or all grade levels (7 to 12).
4. Promotion is by subject—not from a so-

called junior division to a so-called senior division.

The U. S. Office of Education² recently referred to the development of the undivided six-year high school as follows:

The most convincing increase has occurred in the case of the undivided, i.e., five-year and six-year schools. Their number more than doubled during the biennium 1926-1928. . . . The trends indicate that the undivided school will shortly displace the junior high school as the reorganized school most frequently found. The growth in the number of undivided schools is an indication that the reorganization movement is finding its way into smaller school systems. The junior and senior segregated schools have been developed principally in the larger centers.

The Junior-Senior High School of the 3-3 Type. This type of six-year high school has the following characteristics:

1. It incorporates grades 7 to 12, inclusive, in two units or divisions; the junior unit incorporates grades 7 to 9, and the senior unit incorporates grades 10 to 12.
2. Only one principal is in charge of these six grades. An assistant principal may be directly in charge of one unit, and another assistant principal may be directly in charge of the other unit.
3. There is a tendency to preserve a clear distinction between the junior and the senior units.
 - a) Both units use the same school plant, but certain parts are sometimes allocated exclusively to one unit, only.
 - b) Some teachers are assigned to both units, but others are assigned to a certain unit, only.
 - c) Some extracurricular activities are open to pupils from both units, but others are open to pupils from only a single unit.
 - d) Departmental heads and advisory officers are sometimes assigned to duties throughout the six grades, but at other times they are assigned to one unit, only.
4. Promotion is by subject rather than from a so-called junior division to a so-called senior division.

A Compromise Type

The 3-3 junior-senior high school is a compromise between the organization which provides a separate junior and a separate senior high school incorporating three grades each and the organization which provides an undivided six-year high school. The break between its two divisions is more marked than the break between the same grades in the undivided six-year high school, but it is less marked than the break between the same grades where separate junior and separate senior high schools are provided. In its lower division, the junior-senior high school of the 3-3 type attempts to make use of most of the desirable features of the junior high school, and in its upper division it attempts to make use of most of the desirable features of the senior high school. It is important that it be kept in mind that a junior-senior high school has only one principal, but that a junior high school and a senior high school in the same system have separate principals. A smaller percentage of the junior-senior high schools of the 3-3 type than of the 2-4 type are in rural and village communities.

The Junior-Senior High School of the 2-4 Type. This type of six-year high school has the same characteristics as the junior-senior high school of the 3-3 type with a single exception, namely, that the divisions here are on

the 2-4 basis rather than on the 3-3 basis. The 2-4 junior-senior high-school organization is a compromise between the traditional four-year high school, the undivided six-year high school, and the separate junior and the separate senior high schools of two and four grades, respectively. The break between its two so-called divisions is greater than the break between like grades in the undivided six-year high school, but it is less marked than the break between like grades in the 8-4 organization or in the organization that has separate junior and separate senior high schools of two and four grades, respectively. An attempt is made to incorporate in the so-called junior division most of the best practices of the separate junior high school, and to incorporate in the so-called upper division most of the desirable practices of the separate senior high school. The upper six grades of all 6-2-4 organizations do not necessarily constitute a 2-4 junior-senior high school because some 6-2-4 organizations treat grades 7 and 8 as elementary grades, and others have a separate principal for each of the two high-school divisions.

Relative Use of Types

That the three types of six-year high schools held important positions among the eight main types of reorganized high schools for white pupils in 1929-1930³ is indicated by Table I. The undivided six-year high school that year outnumbered every other type of reorganized high school for white pupils, but it did not enroll as large a percentage of all white pupils as did either the 3-year junior high school or the 3-year senior high school. This is due to the fact that approximately three fourths of the undivided six-year high schools are found in communities of fewer than 2,500 people while approximately three fourths of the separate junior and separate senior high schools are located in cities of 10,000 or more people. Only 4 per cent of the undivided six-year high schools are in communities of more than 30,000 people. Each of the three types of six-year high schools is represented by a larger number of schools than is any other of the eight main types of reorganized high schools with a single exception—the junior high school incorporating grades 7, 8, and 9; but the undivided six-year high school is more frequently found than even that type.

TABLE I. Reorganized High Schools of Eight Main Types for White Pupils in 1929-1930

Types of Reorganized High Schools	Number of All Schools	Per Cent Pupils Enrolled in High Schools
Six-year high schools, undivided	1,446	7
Junior high schools, grades 7 to 9	1,233	17
Six-year junior-senior high schools, 3-3 type	936	7
Six-year junior-senior high schools, 2-4 type	637	3
Senior high schools, grades 10 to 12	454	8
Junior high schools, grades 7 and 8	204	1
Junior high schools, grades 7 to 10	196	1
Senior high schools, grades 9 to 12	142	2
All other reorganized high schools	316	3

In a succeeding article the writer will attempt to evaluate the three types of six-year high schools.

¹U. S. Office of Education, Bulletin, 1931, No. 20. Biennial Survey of Education in the United States, 1928-1930, Vol. I, Chapter III, pp. 2-3.

²Fifth Yearbook, Department of Superintendence. "The Junior High-School Curriculum," p. 14 (1927).

New Doctrine for Monroe—III

By Brooke W. Hills

MR. HAMILTON SPEAKS HIS PIECE

Following the nine days' wonder, occasioned by the accession of Smith B. Hamilton to the throne at Monroe and his resignation at Roseland, the tumult and the shouting died away, and he found himself in that uneasy period known to every experienced schoolman who has changed his position. We are referring to that period of between-jobs, that time when a retiring superintendent sees his successor being chosen with all the fanfare and hurrah-boys that has just marked his own election elsewhere. That period of general let-down, the place of doldrums, so to speak, when the first enthusiasm of the new appointment is past; when congratulations, good-natured and sometimes otherwise, have been received and polite acknowledgments returned. That period when, in odd moments, a few secret doubts begin to arise as to the real wisdom of making a change; and more definitely, that period when there begin coming to light, matters of possible future annoyance to take the place of annoyances left behind.

To anyone who has followed the adventures of Smith B. Hamilton in his winning of the Monroe superintendency, it is evident enough that here was a man who would not be lightly disturbed by birds of ill omen flapping across his pathway. That he was determined, had been proved long before he swept to a triumphal election over the heads of many and many a candidate. In this latest venture, he had exhibited powers of resourcefulness unusual in a man of his years. For that matter, his whole record showed conclusively he had the courage and persistence to face a hazard squarely, and to see it through to the end, no matter how rough the going.

Yet, in spite of these personal attributes, in spite of his confident expectation to prove himself the man who could bring peace to the troubled schools of Monroe, more than once uneasy shadows flickered across his mind in those early morning hours. To be sure, the moment he put his feet on the ground and glanced about him, those little preliminary misgivings seemed far away. After all, there wasn't so much to worry him. A larger, better job; a new deal for himself; Burnham had said the trouble-making Tyrone would resign at the end of the school year; a unanimous election, unanimous after a most searching investigation by his new employers; the winning-over of that doubting board member, Benkert; plain evidence that the passing administration at Monroe had merely made a gesture of holding things together the last three years and longer, with the consequent opportunity for him to make a showing—all these and other reassuring thoughts flooded into his mind to drive out those foolish fancies of the night before.

But in spite of all this, Hamilton could not possibly overlook the two or three unsigned letters that came to him during this period. The letter telling him plainly that he would be a very wise young man to leave alone the status of the married women teachers. The letter reminding him of the considerable number of unemployed local beginning teachers, with the straight suggestion he would make himself much more solid in his new job, should he give these sons and daughters of Monroe taxpayers a chance to put their training in the state normal schools and colleges to some more profitable use than merely an occasional day's substituting.

"Just as if," thought the disgusted Mr. Hamilton after throwing this letter in the wastebasket, "just as if the schools should be run for the benefit of half a dozen unemployed, who haven't yet shown their ability to hold a job in a place where the influence of their families and their friends and their local clubs and associations are not deciding factors in the question of their tenure, rather than that their classes should be run for the benefit of the hundreds of children who have a right to the best teachers obtainable." These letters and others of the same general character, familiar to every man who has been out on the educational firing-line for any length of time.

And there were callers. The several who introduced themselves over the telephone with the usual pleasantries, followed by the real message. The real-estate dealer who had just the right house in just the right neighborhood for the new superintendent. The man who was "sure the Mr. Hamilton, about whom he had heard so many good things already, would be willing to let him go through the permanent records in the high school to get a little information he really needed in his business. The board had some fool rule preventing him from this enterprise in the past, and he was sure Mr. Hamilton would soon put a stop to this board

nonsense." These usual telephone callers and similar others; every schoolman recognizes the breed.

But there were some personal callers. Several. And one of decided consequence.

One hot afternoon in August, while packing some of the kitchen dishes preparatory to the near advent of the moving vans, Hamilton heard a car come to a stop in front of his curb, and glanced up to recognize in the newcomer no less a person than Benkert himself.

When they were seated,

"Mr. Hamilton, a most unexpected complication has arisen, a really serious complication. Our high-school principal notified us last night that he has decided to retire immediately. I came straight over this afternoon to talk it over with you."

"I'm sorry to hear this . . . it sure is a genuine problem, coming only two or three weeks before school opens."

"Yes, that's bad enough in itself," was the reply. "But here is the real complication, and I'm mighty sorry to tell you this; in spite of all his talk about quitting, one of the teachers, a man named Tyrone, says he has decided to stay on awhile longer and wants the job of principal. He has already seen several members of the board, and it looks to me as if he is certain to have the support of at least three. Do you happen to know him?"

"I've heard of him," grimly replied Hamilton.

"Well, I'm not sure what you've heard. Personally, I don't know a whole lot about him as a teacher, and I don't know just how he would make out if he were appointed principal. But I do know he is pretty strong in Monroe; he is a member of several groups in town that have made themselves felt from time to time in our board affairs—in fact, this element was largely responsible for the outcome of the last two school elections. I think the board members who are likely to push this candidacy really want to do the right thing for the schools, but in spite of this, it's pretty hard for them to turn down the people responsible for their election. You can see this easily enough. These factions at present are squarely in back of Tyrone. The rest of us on the board can control the vote, of course, and keep him out, if that is best for the school. But we are thinking of your interests as well. That's why I'm here this afternoon. We want you to know the situation and would like to have your own recommendation."

"I don't know that I should try to advise you. If you oppose Tyrone, it may be a bad strategic move for you. On the other hand, if you try to go along with him and his crowd, sooner or later you may lock horns with them. I'm mighty sorry this matter comes up before you have a chance to get acquainted in town and get on your feet. It's too bad you'll have to make a quick decision. Think it over and let me know what you decide."

To the listening Hamilton there seemed to come again those words spoken from across the street, the comment overheard the night of his election,

"He? What, that new la-di-da? Why, that fellow Hamilton won't last a year with me!"

And again he recalled the admiring giggle from the others in that group as they were swallowed up in the darkness,

"You tell 'em, Tyrone!"

Hamilton looked up quickly at his worried informant.

"Mr. Benkert, I appreciate your kindness in laying the cards on the table. I can give you my answer right now. It seems to me the situation cuts much deeper than the question of the fitness or unfitness of Mr. Tyrone for this position. It's just a question of whether the schools are going to be run for a group of self-seekers, or run for the benefit of the children."

"I believe in promotion from the ranks, whenever possible. Teachers have a right to expect training in service to fit them for better positions, when a chance for advancement comes. But getting right down to brass tacks, this isn't a matter of promotion; it's just a question of what is the expedient political thing to do. Under these conditions, I'm here to say I will not recommend the appointment of Mr. Tyrone, or anyone else. I'll run the school myself, if necessary, before I'll try to feather my own nest in this fashion!"

More quietly, then, but with a tone of finality,

"I've had a chance to do some thinking of late, Mr. Benkert. I've reached one conclusion and here it is: These indefinite, wavering, easy-going policies that seem to have brought the schools nowhere in the past, are just out, completely out, so far as my own ideas are concerned. It's time for a different setup."

The first and second adventures of Mr. Hamilton in getting the election at Monroe were published in the October and November issues of the JOURNAL. The story will be continued in February.—EDITOR.

And to the departing Benkert an hour later, "Sum it up this way: I'm going to do my best to give Monroe a new deal."

His visitor smiled. "A new Monroe doctrine, so to speak?"

"No, sir. A new doctrine for Monroe!"

VERY SHORT

That evening Benkert told a couple of his board colleagues of his conversation with the new superintendent.

"He's a brave young man!"

"Or foolish, maybe?"

"I don't believe so. It looks as if we might have a little action at last. I'm for him!"

And while he was at it, Mr. Benkert made the same remark to a number of other citizens and taxpayers.

MR. HAMILTON SEEKS TO BE A GOOD FELLER

The town of Monroe, like many other districts adjacent to a large city, was more or less subject to growing pains. This process was systematically fostered by an active Chamber of Commerce, a couple of struggling newspapers, billboards advising the passerby to "watch us grow," and a considerably larger number of real-estate dealers than was absolutely necessary. Among these were several promoters of various subdivisions of property, sales of which they fondly hoped would some day justify the ornate gates of stucco and plaster adorning the main entrances. In consequence of all this, various boards of education at judicious intervals had dotted the landscape with several eight-room schools of the usual type. Possibly they were prompted more by those citizens who had bought in haste and were now looking for the athlete who could cover the distance to the station in the advertised "ten minutes' easy walk," than from any sensible survey of the actual needs of the town children. We have seen other communities operated on this basis. Nor is this policy confined entirely to school boards here and there who, to quote the words of one high-minded patriot in a certain executive session one night, find "good, big, building programs an awful easy way to put an end to a lot of the yawping in town." Consider the road you drove yesterday afternoon when you went out into the country to get a bag of Golden Bantam corn!

It was while he was sitting in the front row of a series of concrete bleachers in the high-school gymnasium — concrete bleachers used possibly twenty-five times yearly in the one gymnasium provided for a school of more than a thousand pupils! — it was at this opportune moment, while he was considering the point of view of architects who prefer more seats and less floor space in the room provided for physical education, that Mr. Hamilton's soliloquy was interrupted by a gentleman who introduced himself as the "head janitor of the building."

It is not our purpose to decry the public-school janitor. Heaven knows that everywhere there may be found those servants of the school who realize that the really valuable janitor is the man who takes a personal pride in the building turned over to his care. Believe it or not, men can be found who do not need the constant reminder of the principal that they are expected to find work enough to keep them busy throughout the day, rather than to spend a considerable part of it in the janitors' room, complaining of the muddy feet that come storming in from the playground, or the hands that don't always place the crumpled paper towel in the basket in the corner of the lavatory. Yes, there are these men, and they may be found. More power to them, and may their tribe increase! — but such was not this particular head janitor, the "Dad" Atkins who introduced himself that hot afternoon to our Mr. Hamilton.

We may characterize Mr. Atkins well enough by saying that he had secured his job, in the first place, because someone else wanted another job, and needed his support and that of his crowd to get it. Petty politics, horse-trading, or what you will, his appointment reflected the attitude of a considerable part of Monroe, and his continued tenure was simply a reflection of the general local picture. Many times in the past there had been ominous grumbling but no concerted action. His friends tended to this.

Mr. Atkins was very much "pleased to meetcha, Mr. Hamilton." In fact, he was sure the new superintendent would be gratified to see what had been accomplished during the summer (even though he had strained his back and it hurt him something terrible). And he was just tickled to death that Mr. Hamilton could get this chance to see a building that had been "put in apple-pie order — even though, between you and I, the other two are so dumbed lazy they don't lift a finger to help me out."

The new superintendent, politely expressing his pleasure at the good fortune responsible for this personally conducted tour of the premises, followed his guide the next half hour from room to room, noting with interest the broken desk back here, the missing inkwells there — "most all the children use fountain pens, you see." The window shades, spattered with new paint from the ceiling, spattered because the worthy Mr. Atkins had neglected to take them down before the painters went to work. He noted the barrel of floor oil, carefully placed out of the way, behind and close to the furnace. With a growing interest he noted the ancient dates on the last refills of the fire extinguishers, the dust on his finger when he thrust it between a couple of folds of the coiled fire hose — eloquent testimony as to the time of its last inspection. All these and many other little things he noted, the while he listened to his companion's glowing description of his summer's labors.

The trip concluded to the eminent satisfaction of each, the two stood for a moment in polite conversation in the lower hall. It was here that Mr. Hamilton, listening for the tenth time to the recital he was beginning to know by heart, glancing the while through the open door at the frowsy, untrimmed edges of the walk to the street, the clumps of shrubbery half filled with the accumulation of leaves from the previous autumn, the patches of gravel beyond the sidewalk thickly dotted with straggling weeds — it was just at this point when his reverie was again interrupted by Mr. Atkins.

"Now, I've shown you all over the place. Aren't you surprised at what you've seen?"

"I am," said Mr. Hamilton quickly and truthfully. "Very much surprised."

"I knew you'd be," replied his companion. And in a burst of mellow confidence,

"Yuh know, Mr. Hamilton, I seen you at the board meeting the night you were hired, and I said right away to myself and a lot of my friends, 'Now this man here's all right. He's got some sense, he has. Him and I will get to know each other pretty quick!'"

"I agree with you; we will come to know each other much better, very soon, I honestly believe."

"I knew you aren't the kind of feller who'd be trying to get the building and grounds committee to come snooping around here every week or so. But it's all O.K. when you want to come around. If I don't happen to be in the janitors' room, you can most always ketch me by just hollering 'Dad,' and I'll come a-running, no matter how busy I be. Don't you hesitate to drop in whenever you feel like it."

"You may depend upon it, you are sure to see me often," gravely replied Mr. Hamilton. Which again was an absolutely truthful statement of his exact intentions.

The gratified Mr. Atkins shortly retired to his labors in the basement, and worked so rapidly he was able to leave the building a good hour before the usual quitting time, stopping in on his way home to inform his friend, Mr. Tyrone, that he'd had a heart-to-heart talk with the new superintendent, and that most anyone could get his number without a whole lot of trouble, and he figured the best thing Tyrone could do was to get acquainted with Hamilton at once.

Pleasant indeed was this information to the ears of the aspiring candidate for the high-school principalship. A disquieting rumor had reached him through the day that possibly Hamilton might not be quite so easy as he seemed; that this quiet, courteous manner of his might be a cloak, a very effective cloak, for an unusually determined character.

"A good idea," said Mr. Tyrone. And putting on his hat, he lost no time in setting out for the office of Mr. Smith B. Hamilton.

(To be continued in February)



MURAL IN THE TILDEN TECHNICAL HIGH SCHOOL, CHICAGO, ILLINOIS

Prohibited Legislation Regarding Common Schools

Prof. Clarence E. Ackley, Pittsburgh, Pa.

Constitutional Specifications

Provisions for state-wide systems of common schools, with uniformity as to minimum essentials regarding accessibility, sources and amount of support, adequate supervision, administration, and control, required the breaking down of many local whims, local prejudices, mal-practices, and evasions. The constitutions of today, therefore, contain a wide variety of accumulated prohibitions designed to prevent legislatures from favoring a few individuals, or a few communities, at the expense of the general welfare of the state as a whole.

Table I lists these provisions for each state, and the summary at the end of the table shows the frequency with which each of the provisions is mentioned. Lack of space makes it impossible to give here a detailed citation of the article and section of the constitution in which each of these restrictions appears. Most of them are in the Bill of Rights; many are under the heading "Legislative"; other are under such headings of the constitution as "Education," "Taxation," "Miscellaneous Provisions," "Schedule," etc. Only six states have constitutions which omit all such restrictions as those listed. These states are Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont.

TABLE I. Types of Legislation Prohibited by Provisions Appearing in the Constitutions in Force in 1934
(Meaning of symbols used explained at bottom of table)

States	Prohibitions Specified
Alabama	b, k, m, n
Arizona	a, c, n
Arkansas	a, h, y
California	a, b, c, d
Colorado	a, b, c
Delaware	g
Florida	z
Georgia	a
Idaho	b, d, e
Illinois	a, b, c
Indiana	a, b, e, h
Iowa	a, e
Kansas	a, e, y
Kentucky	a, b
Louisiana	b, c, e, n, y, z
Maryland	a
Michigan	a
Minnesota	a, b, c, d, f, g, t
Mississippi	a, b, c
Missouri	a, b, c, d, f, g
Montana	a, b, c, d, y
Nebraska	a, b, c, d, k
Nevada	a
New Jersey	b, c, z
New Mexico	a, b, c, n
New York	c
North Carolina	g
North Dakota	a, b, c, d, e
Ohio	c, e, y
Oklahoma	b, d, f, z
Oregon	h, n
Pennsylvania	b, c, d, f, g, z
South Carolina	a, m
South Dakota	a, b, c
Tennessee	a, b, c, d, z
Texas	a, b, c, d, f, y
Utah	a, b, c, e
Virginia	a, c, f, y
Washington	b, f, n
West Virginia	a, c, d
Wisconsin	c, e, n
Wyoming	a, b, c, d

EXPLANATION OF TABLE. The small letters, "a," "b," etc., refer to the following restrictions against Local or Special Legislation:

Restriction — Local or Special Legislation	Frequency of Mention
a — When a general law can supply (or relief can be given by any court)	28
b — Providing for the management of public schools (including building or repair of schoolhouses or raising money for school purposes)	24
c — Granting special privileges, immunities, or franchises	24
d — Creating offices or prescribing powers and duties of school-district officers	13
e — Violating requirements that "general laws shall have uniform operation"	9
f — Regulating affairs of school districts	7
g — Establishing or changing school-district boundaries	5
h — For the support of schools	3
k — Forbidding bond issues	2
m — For the incorporation of school districts	2
n — Authorizing apportionment of school funds	2
t — The legislature may repeal special or local laws but may not extend or modify them	1
y — No appropriation may be made for a period longer than two years	7
z — No special or local legislation may be enacted unless notice of intent has been published for a specified length of time	6

The present paper discusses an important phase of school legislation, namely, special laws and special provisions in general laws, to meet special and unusual local situations. The problems involved are fundamental and of importance to all local school districts.—Editor.

Local and Special Laws. It is significant that 42 states have found it advisable to set up constitutional restrictions against local or special legislation and to insist that school legislation shall be state-wide in its operation, even though crafty legislators have often devised schemes whereby they might circumvent the restrictions.¹ It marks a wide departure from the days of purely local control.

In 1821, New York had provided in her constitution that

The assent of two thirds of the members elected to each branch of the legislature shall be requisite to every bill appropriating the public moneys or property for local or private purposes, or creating, continuing, altering, or renewing any body politic or corporate.²

In 1838, Florida, in her constitution, forbade the creation of churches by special act, and required the legislature to pass a general law for their incorporation.³ In 1845, Louisiana did the same as to all except municipal corporations.⁴ In 1846, New York also, by revising and expanding her constitutional pronouncement of 1821, made general legislation necessary for the creation of all corporations except municipal.⁵ These were the beginnings of one of the most difficult of all efforts to place constitutional limitations on the acts of the state legislatures. The value of such restrictions for the cause of public education will be made quite obvious in the following paragraphs.

Other Prohibited Legislation. In a class similar to the prohibitions against local and special legislation are other unique limitations which may also be listed here. Some legislatures, as in Minnesota, may repeal local or special legislation but may not extend or modify it.⁶ The legislatures of seven states may not make any appropriation for a period longer than two years.⁷ The legislature of Louisiana must not give the State Board of Education control over saline lands.⁸

Judicial Interpretations of Restrictions on Local and Special Legislation

Alexander has shown how numerous, whimsical, and fragmentary enactments may become in states still permitting special legislation, and to what extreme and irrational limits efforts at evasion and circumvention may go in states whose constitutions do profess to prohibit it.⁹ In this article, by analysis of important cases adjudicated by state and federal courts, we shall point out basic interpretations of terms and principles involved when a constitutional provision seeks to prohibit special or local legislation affecting the common schools.

1. Basic Conceptions of Corporate Rights. In the famous Dartmouth College case, in 1819, the Supreme Court of the United States defined the nature of corporations in a doctrine that has become firmly established in the courts.¹⁰ By a charter granted by the English Crown in 1769, Dartmouth College in New Hampshire was a corporation with twelve trustees possessed of

¹Alexander, U. S. *Special Legislation Affecting Public Schools*. T. C. Contribution No. 353. Columbia University. 1929.

²New York Constitution, 7:9 (1821).

³Florida Constitution, 13:1 (1838).

⁴Louisiana Constitution, 6:123 (1845).

⁵New York Constitution, 8:1 (1846).

⁶Minnesota Constitution, 4:33 (1857).

⁷Table I, Code designation "y."

⁸Louisiana Constitution, 3:30 (1921).

⁹Alexander. Note 1, *ante*.

¹⁰Dartmouth College v. Woodward, 4 Wheat 518 (1819).

¹¹See also *American Law and Procedure*, Vol. XII, pp. 224, 225.

appropriate privileges and powers to conduct the affairs of the college, and with authority to fill all vacancies in their own body. In 1816, the New Hampshire legislature attempted to alter this charter by increasing the number of trustees, the additional members to be appointed by the governor and to be given the more important functions of the trustees in controlling the institution. The original trustees contested the legislation, and the United States Supreme Court declared the original charter to be a contract, perpetually continuing, and not subject to alteration. The act of the New Hampshire legislature was, therefore, an unconstitutional effort to impair this obligation of contract. The charter had not been issued by the legislature, nor had the legislature any method of acquiring authority to alter powers it had not originally conferred.

As early as 1843, the Supreme Court of Illinois had held that a common-school district is in the nature of a corporation, created by the legislature, possessed of only the powers conferred by the legislature, and subject to such alteration as its creator had retained the right to make. That decision contained these words:

An incorporated township for common-school purposes is a public corporation, or a quasi-corporation. In respect to such a corporation, the legislature has an unquestioned right to change, modify, enlarge, restrain, or destroy; and may exercise a superintending control over all its money and other property, securing, however, as a matter of good faith, the effects of the corporation for the use of those for whom such effects were donated or purchased.¹¹

This court's conception of the common-school district was, as many subsequent decisions show, far in advance of the opinions prevalent for the next half century. It was in complete harmony with the Dartmouth College case, yet presented the new feature of charter limitations applicable to public corporations or quasi-corporations created by the legislature. In dealing with such a corporation, the legislative power is not exhausted by use, but the legislature, after trying out one or many plans, may continue to seek additional improvements through changes. Little more needed to be said when the case was cited in *Farnum's Petition* 28 years later,¹² or even 80 years later in the North Carolina case of *Coble v. Commissioners*.¹³ But between this early Illinois case and the present time, many conflicting views have prevailed, and very frequently there has been apparently no effort to harmonize local whims and state policy. Knowledge of the power to alter has stood out much more conspicuously than an inclination to use the power unselfishly.

2. Definitions Evolved. The present conceptions of "special," "general," "local," and "uniform" legislation were evolved slowly and gradually.

In 1855, the Supreme Court of California held to be constitutional an act of 1853 entirely specific in its character. Ryan had sued Johnson, a justice of the peace, for extorting illegal fees in his official capacity, and had shown that the fees Johnson had collected were higher than those allowed in other counties. The lower court held that the act which purported to authorize Johnson to collect fees different from those allowed in other counties was unconstitutional, because it violated the requirement of uniform operation of general laws. The Supreme Court, however, reversed the decision and held the act to be constitutional, saying:

It is not an act of a general nature, within the meaning of the constitution—it is entirely of a specific character.¹⁴

¹¹Bush v. Shipman, 5 Ill. 192 (1843).

¹²Farnum's Petition, 51 N.H. 376 (1871).

¹³Coble v. Board of Commissioners, 184 N.C. 342, 114 S.E. 487 (1922).

¹⁴Ryan v. Johnson, 5 Calif. 87 (1855).

Six years later, the same court approached a more exact definition of terms, explaining that by the words "all laws of a general nature shall have a uniform operation," it is meant that their operation shall be the same in all parts of the state under the same circumstances and conditions.¹ This definition proved fully satisfactory to the Supreme Court of Indiana in *Groesch v. State* in 1873,¹⁶ and to the Supreme Court of Nebraska in 1886.¹⁷

In *Cory v. Carter*, "uniformity" was more exactly defined by the court in the following words:

It does not mean that all the schools shall be of the same size and grade, or that all the branches of learning taught in one school shall be taught in all other schools, or that the qualifications as to age and advancement, which would admit a pupil in one school, would entitle such pupil to admission into all the other schools. Uniformity will be secured when all the schools of the same grade have the same system of government and discipline, the same branches of learning taught, and the same qualifications for admission.

And a "general" system of schools was said to be one that "must extend over and embrace every portion of the state."¹⁸

In 1869, the Supreme Court of California elaborated somewhat the definition of a general law by explaining that the phrase "general law" does not necessarily mean a law which operates upon all persons or things. The word *general* comes from the word *genus*, and relates to a whole genus or kind, or, in other words, to a whole class or order. Hence a law which affects a class of persons or things less than all may be a general law.¹⁹ More concisely but to the same effect the Supreme Court of Minnesota, in 1919, said:

A law is "general" if the class to which it applies requires or justifies legislation peculiar to itself in the matters covered by the law.²⁰

This court also defined a "special" law as being a statute relating to particular persons or things of a class.²¹ This definition is substantially the same as that given in a federal case in which, in 1884, it was held that a "special act" affects a part only of the subject to which it relates, and whether an act is considered "public" or "private" is not relevant to the question of whether it is "special" or "general."²²

3. *Force of Priority.* It is a well-known fact that the development of state school systems in America has been accomplished largely by slowly uniting the existing community school systems under larger units of organization; by the gradual transference of powers which had once been given to the smaller local administrative units to larger units of administration; and by the slow and gradual development among our people of a state conception of and interest in education to replace the purely local conception and interest which characterized the earlier period of our educational history.²³ Very often special legislation, applicable to a single locality, afforded the aid or the encouragement that led to the establishment of a conspicuously efficient system of schools for the community. In other instances, it made possible a diversion of school funds to other purposes and resulted in an impoverished and inefficient schooling of the children. Therefore, a determination of the extent to which later constitutional limitations on special legislation could affect special legislation already existing became a very important matter in the courts.

As early as 1865, the Supreme Court of

¹⁵*People v. Judge of the Twelfth District*, 17 Calif. 574 (1861).

¹⁶*Groesch v. State*, 42 Ind. 547 (1873).

¹⁷*State v. Berka*, 20 Neb. 375 (1886).

¹⁸*Cory v. Carter*, 48 Ind. 327 (1874).

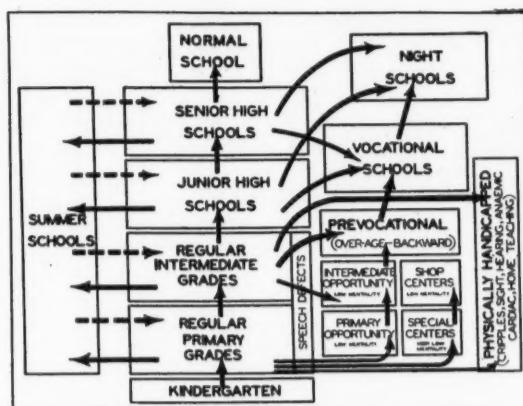
¹⁹*Brooks v. Hyde*, 37 Calif. 366 (1869). To same effect, *Wheeler v. City of Philadelphia*, 77 Pa. 338 (1875).

²⁰*State v. Independent School District of Granite Falls*, 143 Minn. 433 (1919).

²¹*State v. Dakota County*, 142 Minn. 223 (1919).

²²*Dundee Mortgage and Trust Investment Co. v. School District No. 1*, 21 Fed. 151 (1884).

²³*Cubberley, E. P. State School Administration*, p. 139.



INCREASING COMPLEXITY OF THE SCHOOLS

The Baltimore board of education has used the above graph with splendid effect to show how the greater efficiency of the school system has involved also additional complexity. The present-day public-school system of Baltimore is making a strong effort to provide the broadest possible opportunities for the widest variety of conditions. This policy has brought about the establishment of junior high schools, prevocational classes, opportunity classes, shop centers, special classes for mentally and physically handicapped children, etc. Instead of a single track, all children have three tracks of progress adapted to their mental and physical needs and abilities.

Maryland had answered the question by declaring that a constitutional provision against the passage of special laws does not affect special laws passed prior to the adoption of the constitution.²⁴ The Supreme Court of California, in 1881,²⁵ and the Supreme Court of Colorado, in 1890,²⁶ held the same view. The Supreme Court of Georgia, in 1895, said that a general law is not to be considered as a local law merely because a local law relating to the same subject existed at the time the general law was enacted.²⁷ In 1908, Judge Hobson, of the Kentucky Court of Appeals, made a clear summary of the matter, as follows:

The makers of the constitution intended to prohibit special legislation, but they contemplated that existing special legislation should continue until changed by the legislature, unless in conflict with some of its provisions. To have blotted out at once all special legislation in the state would have been to throw the business of the state into chaos. There was the same reason for continuing schools established under special acts. Debts had been created, buildings had been erected, and the education of pupils had been begun. It was important not to interrupt the course of education, or to make a new system which might make unsuitable a large part of the property which had been thus acquired. The interest of the people required that these schools which they had established should not be disturbed. . . . That our constitution has not the effect to repeal or make inoperative special laws passed before its adoption has been often decided by this court — as to schools: *Roberts v. Clay City*, 102 Ky. 88; *Board of Education of Hawesville v. Louisville etc. R. Co.*, 110 Ky. 932.

. . . It is true the legislature must provide a "uniform system" of common schools; but when the legislature has so provided, there is nothing to inhibit a local tax in aid of the common schools to improve and perfect it.²⁸

In other cases in California, Colorado, Georgia, Illinois, Kansas, Kentucky, Maryland, New York, Pennsylvania, and South Dakota the courts have construed the constitutional provisions against special or local legislation not to be retroactive as to legislation already in existence when the constitutional prohibition became operative.²⁹ However, since the adoption of a constitutional provision usually involves a surrender acceded to by the citizens of the state for the purpose of greater benefits, it is entirely appropriate for the constitutional provision to specify or imply an abrogation of existing legislation when it is out of harmony

with the new provision. Accordingly, in some of the cases in Illinois, Mississippi, and New Jersey, the courts have construed the provisions as being retroactive.³⁰ It appears, therefore, that the force of a constitutional prohibition of local or special legislation may, or may not, be retroactive, depending upon the wording of the provision and the amount of legislative power surrendered in the prior enactment.³¹

4. *Federal Requirements.* After the ratification of the Fourteenth Amendment in 1868, the legislation of each state was subject to the requirement of extending to colored citizens the same rights, privileges, and immunities as those secured by the constitution and laws to the white citizens of the state. Any legislation which violated this policy was repugnant to the Federal Constitution, and, therefore, void.³²

In 1880, the Supreme Court of Alabama ruled that there is nothing in the National Constitution which prohibits a state legislature from enacting local laws different in their provisions from the general code of laws for the state and operating only in certain territorial districts.³³ In 1884, and again in 1886, the Supreme Court of the United States ruled that the provisions of the Constitution of the United States did not prohibit local or special legislation:

As we said in *Barbier v. Connolly*, 113 U.S. 27 (1884), speaking of the Fourteenth Amendment: "Class legislation, discriminating against some and favoring others, is prohibited; but legislation which, in carrying out a public purpose, is limited in its application if, within the sphere of its operation, it affects alike all persons similarly situated, is not within the amendment."³⁴

²⁹*Mitchell v. People*, 70 Ill. 138 (1873); *Chidsey v. Scranton*, 70 Miss. 449, 12 S. 545 (1892); *State v. Morris*, 48 N.J. Law 99, 2 A. 666 (1886).

³⁰Compare note 10 *ante* and the paragraph to which it refers.

³¹Discussed fully in *Constitutional Limitations on Legislation for the Common Schools*, pp. 118 ff. Ackley, Clarence E., Doctoral Dissertation (unpublished). University of Pittsburgh, 1933.

³²*Davis v. State*, 68 Ala. 64 (1880).

³³*Hayes v. Missouri*, 120 U.S. 68 (1886).

(To be concluded)

HIGH-SCHOOL LOAFERS

For many years there have been in our high schools large numbers of pupils who enjoy the school as though it were a juvenile club. The associations are pleasant; the buildings are warm, clean, and fairly comfortable; the opportunity for participation in athletics is better than can be found in any outside organization; the food in the cafeteria is inexpensive and quite palatable; in fact, barring the unpleasantness of being expected to work, it is a very agreeable place in which to spend one's time. But after a boy has reached his late teens, should he be permitted to enjoy such privileges at the city's expense, without taking his work seriously, without putting forth sufficient effort to do his work well? If it is recreation and entertainment that are desired, they can be provided much more economically than education, and probably belong to some other organization, not the school. The high schools exist to prepare pupils for life, either to take their places among the workmen of tomorrow as happy, helpful citizens, or to continue their work in college. If young men and women wish to avail themselves of the privilege of a public high-school education, they must take their opportunity seriously, and be willing to work, or else forfeit that privilege.

Thus, it appears that the retardation rule adopted by the Baltimore school board does not act as a hardship to the students. It places no responsibility on those who, because of illness, are unable to do their work; it is willing to provide more suitable work for those pupils of varying ability; it demands only honest effort from those who wish to enjoy the advantages of public education.— J. CAREY TAYLOR, Baltimore, Md.



INTERIOR OF THE THOMAS JEFFERSON HIGH SCHOOL CAFETERIA, SAN ANTONIO, TEXAS, ONE OF THE LARGEST IN THE SOUTHWEST. IT IS LOCATED ON THE GROUND FLOOR, WILL SEAT NEARLY 1,000 STUDENTS, HAS NATURAL LIGHT AND VENTILATION.

San Antonio Centralizes School-Cafeteria Cooking

C. M. Meadows, Jr.

A community kitchen cooking for 18 schools is an innovation through which the San Antonio public-school cafeteria system is extending its benefits and at the same time economizing on the service to a substantial portion of those who already had the cafeteria advantages.

The service expansion aspect of the community-kitchen project should be stressed, for to place undue emphasis on economy might suggest it was forced to keep the cafeteria system out of the "red." As a matter of fact, the smallest cash balance shown by the system at the end of any school year in the past five was \$5,474.94 in May, 1933, the highest being \$16,058.39 in 1931. During the past five years the cafeteria system has put back into the system from its income the sum of \$33,786.19 for equipment and repairs. Meanwhile, of course, it has paid its own way without a cent of direct cost to the taxpayers for operations.

But school authorities agree that the cafeteria's highest obligation is in service and convenience to pupils rather than in showing profit. Economy and efficiency of operation are sought as the means to a greater end — to bring about the serving of a greater number of persons with bigger and better lunches and, when possible, at cheaper prices. In spite of mounting food prices, R. S. Menefee, president of the San Antonio Board of Education, recently announced plans to reduce the price of a hot plate lunch at the cafeterias from 15 cents to 10 cents. Formerly the price was 10 cents but was raised to 15 cents early in 1934.

Careful, constant supervision and a resultant minimizing of waste are credited by Mrs. E. O. Moffett, director of the city-wide system of 41 public-school cafeterias, for the fact that the system closes each season with a substantial cash surplus. While the community kitchen facilitates efficiency and economy, its underlying motive, Mrs. Moffett insists, was to better serve the children in a group of smaller schools.

Available to All Students

The community-kitchen idea grew out of an emergency-relief project. For a time last year

school children from families on relief rolls were served cafeteria lunches that were paid for out of relief funds. Because some of those children attended schools that had no cafeteria, the lunches were delivered to such schools after preparation at the cafeteria kitchen of San Antonio Technical and Vocational School, centrally located in the downtown section.

The plan worked so well that it was decided this year to apply it generally to schools without cafeterias and some others too small for individually profitable cafeteria operation. While the system as a whole has been running for years without a deficit, Mrs. Moffett points out that certain small schools did go in the "red" on occasions. The result was that the individual managers of those cafeterias were inclined to curtail the variety of food served (in order to reduce waste through possible overproduction) and to pare portions. The pupils consequently were the losers. The community-kitchen plan of mass production for 17 schools was seized upon as a means of giving back to those youngsters the wide varieties and ample portions that are the rule in the larger and better-patronized institutions. Subsequently a relief feeding project revived at an eighteenth school, which is among those having their own cafeteria kitchens, resulted in it also being supplied from the community kitchen.

So far the new plan is working nicely. It happened that the facilities at the technical-school kitchen were adequate for the added burden, so no expensive enlargements were necessary. At present the cooked foods, in closed-metal containers, are transported to the 18 other schools in automobiles. If the plan is developed further, a small fleet of trucks may be necessary. At each kitchenless school to which the food is carried, two paid employees receive and serve the lunches, one of them remaining to clean up after lunch. The two with a few student helpers, who work for their meals, constitute a smaller personnel than a regularly operated cafeteria would require. All but one of the 18 schools have steam tables to keep the food warm. Some of them already had places for the students to eat, while dining rooms were improvised in others.

The Brackenridge Sandwich Shop

The community kitchen is not the only recent innovation in the San Antonio cafeteria system. Reference to another calls for the story of the erection of a separate new cafeteria building at Brackenridge High School. Being one of the older schools, Brackenridge acquired its cafeteria some time after the original building was erected without any specific provision for it. Normal growth also caused overcrowding in the building until this year additional facilities were imperative — and at a time when money for new construction was far from plentiful. Thanks to the use of salvaged material, however, a brick structure was built and equipped at a cost of \$35,000. Besides saving more than half the cost of construction as compared with new material, according to President Menefee's estimate, the move reclaimed at least nine needed classrooms in the school building proper and freed the school from odors that were noticeable because it was not originally designed to include a cafeteria.

The new cafeteria and physical-education building (it has a roof garden, partly covered, for exercising classes and entertainments) is connected with the main building by arched entrances and steel platforms, thus making access easy and comfortable in bad weather. The cafeteria part of the building, 60 by 130 feet in size, has eating space for nearly 600 persons, including the teachers' dining room and two compartments suitable for club luncheons. Dummy elevators convey food to the roof garden, also.

The outstanding innovation in this new building is the sandwich shop, which, with service windows opening on the school playgrounds, is connected with the cafeteria kitchen. Through it and its nickel items the Brackenridge cafeteria is in position to compete with private vendors of such foods, who usually are numerous around large schools and whose sandwiches are not always the most wholesome. There are sandwich stands in connection with other San Antonio school cafeterias, but none is quite so strategically located. The Brackenridge sand-

wich shop is just one example of salesmanship that is practiced in the cafeteria system—the art of making food attractive to whet the appetite for wholesome nourishment as well as to induce those able to do so to buy. There is no apology for seeking to create a demand for the cafeteria products. In fact, President Menefee has announced the desire to use profits from the sale of such "luxuries" as candies to finance free feeding of certain underprivileged pupils now maintained by parent-teacher associations or similar clubs.

How the System is Organized

Mrs. Moffett elaborates on the use of cafeteria salesmanship. A food counter with eye appeal is always the aim. Salads and desserts are placed to make them attractive from a color viewpoint—a red beside a green, for example. Foods are distributed on the counters to accentuate their variety, the director said. She would not put a cup custard next to a meringue pie, because of their similarity.

At present the average plate lunch includes one meat and two vegetables, for any one of which a salad, dessert, or other 5-cent item might be substituted. Bread and butter are free. Drinks are extra, milk being sold at cost to encourage its drinking. Pints of milk cost 5 cents, half pints 3 cents. No other drinks are sold to students except orange juice.

Care and economy are practiced in the buying of supplies for the cafeterias. Supplies are bought from wholesalers who submit lowest bids according to the system's strict specifications as to brands, weights, etc. Mrs. Moffett's office does the buying for the entire system, the supplies being requisitioned by the different cafeterias as needed. Orders are placed each Thursday for delivery the following Monday. However, heavier buying replenishes the pantries with staples once a month.

Menus also are formulated in the central office. They are the same for all schools, though the smaller schools, where sales are lighter, are authorized to reduce the variety.

Each individual cafeteria has its own manager, generally a woman who, having begun in some minor capacity, has been trained in the system. The manager is responsible for keeping her cafeteria out of the "red." She must guard against overproduction, for that is the usual cause of financial loss. With a fairly constant patronage a manager generally can keep her leftovers at a minimum, but sometimes minute surveys of the cooking and serving are necessary to insure ample servings without cooking an excess volume of foods.

Of course, there are some leftovers and, although mechanical refrigeration to avoid spoilage is included in the modern equipment



BRACKENRIDGE HIGH SCHOOL STUDENTS GATHERED AROUND SANDWICH SHOP SERVING WINDOWS ON SCHOOL CAMPUS

The sandwich shop is connected with the cafeteria kitchen of this San Antonio school with the service windows conveniently opening on the school yard.

of all cafeterias, no food is ever served in the same form two days in succession. In some other form it is probably more palatable and certainly more attractive. Salesmanship again!

Growth and Direction of Cafeterias

San Antonio's public-school cafeteria system under unified direction began no earlier than 1922, though there were a few "holes in the wall," as Mrs. Moffett describes them, before that date. Now the system of 41 cafeterias feeds 12,000 to 15,000 pupils daily, employs about 115 persons besides 150 to 200 student helpers who work for their meals, and has a monthly payroll of nearly \$5,000.

Bond money gave the cafeteria system its start. Before it was made available, such organizations as mothers' clubs sponsored cafeterias, and in the high schools they were in charge of the home-economics department where students were taught.

Although the cafeteria at Brackenridge, with its separate building, is the newest in the system, the one at Jefferson High School is the largest—in fact, it is said to be one of the largest school cafeterias in any city of San Antonio's size, having accommodations for 900 to 1,000 persons.

The various cafeterias have such up-to-date

equipment as electric dishwashers as well as mechanical refrigeration. Regular meat inspection by the city health department is one of the advantages from the standpoint of health and sanitation. In the matter of cleanliness the Jefferson cafeteria's facilities for patrons to wash their hands while in line at a series of water taps has attracted widespread and favorable comment.

Mrs. Moffett, who now is working under a three-year contract, looks upon cafeteria direction as a career. A system of promotion of cafeteria employees through stages to managements, and then to managements with more responsibility—from elementary schools to junior and then to senior high schools—encourages the staff, also. Incidentally, Mrs. Moffett favors organization of an association of food-serving managers in institutions of the non-profit-seeking type. Cafeterias are neither home economics nor a commercial industry like restaurants, she pointed out, and should be represented by an organization for exchange of ideas and other mutual benefits.

With San Antonio pioneering in some phases of cafeteria operation, the experiments are considered by J. C. Cochran, superintendent of schools, all the more significant because they are in a city, close to a foreign border, whose racial and economic range might be said to be about the widest in the South. The cafeterias must meet, and are meeting, the school-lunch needs of children from humble Mexican laboring families as well as those from well-to-do American homes. The problem is complicated, Mr. Cochran points out, because cafeterias must cater to more than the usual range of appetites. That they are doing the job satisfactorily and, at least in theory, profitably from a financial standpoint, is, in the opinion of the superintendent, an outstanding achievement.

Cafeterias Have Net Gain

Paul H. Scholz, business manager of the public schools, points out that the San Antonio board of education, which owns and operates the cafeteria system, charges the cafeterias no rent and that none of the cost of taking care of the school-bond indebtedness is paid by them. Perhaps these items, together with summer salaries and administrative costs that actually dig into the cafeteria system's cash balance and after each year's investment in equipment and

(Concluded on Page 63)



INTERIOR VIEW OF NEW BRACKENRIDGE HIGH SCHOOL CAFETERIA, SAN ANTONIO

This cafeteria is housed in a separate building on the school campus. The building also includes a school roof garden above the cafeteria.

Measuring School Equipment Values¹

Henry Eastman Bennett, Pb.D., Grand Rapids, Michigan

In a well-organized industrial plant a piece of equipment is valued according to its contribution to the whole production process. The mere fact that a machine will still run, or even that it will run as well as it ever did, is of no consequence if its running slows up or depreciates the output of the plant as a whole. However good a piece of equipment, its use becomes extravagant waste when replacing it would show an increase in general efficiency. Pennies are made by robbing the junk pile; millions by feeding it. Waste is doubtless wicked, but wickedest is the waste of human qualities, values, and opportunities, for the sake of penny-wise economies in material things. The value of a tool is measurable only in terms of the product. School desks are educational tools.

The Efficiency of the School Desk

The estimate that about 90 per cent of the school desks in use thirty years ago are still in use, if not consumed in school-building fires, would indicate that the efficiency of a desk as an educational tool is commonly judged by its mere capacity to hold up the weight of the pupil. Millions of seats are in service after forty or fifty years of use, apparently on the theory that seats should serve till cast iron wearies of standing and woods are worn through by pocketknives, pencils, and pants. In an era of standards, tests, and measurements, educational efficiency experts have neglected to measure the effects of pupils' seats on the progress and products of the educational process.

It may be that wood and iron are incomensurable directly with teaching objectives, but the same may be said of many factors of school architecture, subject matter, administrative procedures, and even of teaching methods. At least a crude mode of evaluation is possible. One cannot question that physical discomforts arising from the form or fit of seating beget restlessness and inattention, that squeaks and rattles and transmitted jars are distractions; and that such things appreciably and often seriously slow up the learning process. No one can doubt but that the esthetic appeal of that portion of the material environment which is closest to the child during his school hours, which is ever under his eyes and nose, in touch with his body and hands, which more than anything else is for him the physical school, must affect the appeal which the school has for him, his liking for it, his taste for refined surroundings or his apathy to sordidness and ugliness. Cultural effects of the environment are in proportion to the intimacy of contacts, whether of the playgrounds, home surroundings, the clothing worn, or the school desk used.

Nor would an educator question that seating equipment may hamper or facilitate the teaching process. There are classroom activities and flexible grouping procedures which are expedited by certain types of equipment and handicapped by others; there are fine possibilities in the teaching techniques which cannot survive the annoyances and limitations of unsuitable furniture or furniture arrangements. The higher the level of the inspirational efforts of the teacher, the more her style is cramped by the crude and ugly aspect of her working milieu.

Even more tangible and demonstrable are the effects of seating equipment on habits of sitting, and of sitting habits on physical development and energy; and of these on learning efficiency, general health, and vitality, and on all the values and joys of living. Nothing

but ignorance could cause one to question that the hygienic character of seating equipment is an important factor both in the learning process and in the educational objectives. Unhappily both ignorance and preoccupation with other problems, and more especially a feeling of helplessness to remedy a recognized evil, have caused educators to let the burden of unsuitable equipment handicap the educative process and limit the end results.

Poor Equipment Expensive

No educational factor can be evaluated directly in monetary terms. The best that can be done in that direction is to estimate its influence on the whole educational process and thus ascribe to it a proportion of the whole worth or at least of the whole cost of education. No matter how insignificant a tool or an operation may be in a manufacturing process, its cost must be calculated in terms of the degree to which it may slow up the whole productive process and output. Bad equipment may easily prove more expensive to a school system than a good teacher, though good teachers are incomparably more valuable than any equipment. Assume that the teacher, good or bad, could do ten per cent, five per cent, or two, or even one per cent better teaching with one sort of equipment than with another. Then the worth of that teacher's work is enhanced because of the better equipment by at least ten, five, two, or one per cent of the whole expenditure for the educational work entrusted to her, including the cost of overhead, maintenance, and capital investment. On the basis of \$100 per year per pupil, the waste through the use of each inferior equipment unit would be ten, five, two, or one dollars per year. The waste in human values, in unrealized opportunities, would, of course, be as infinitely greater as the worth of education is greater than its money cost. Nor is this all, for seating conditions unquestionably do affect permanent general health, susceptibility to disease, and particularly the conservation or injury of eyesight. The human values at stake make questions of cost seem trivial.

It is not our purpose to appraise any sort of school equipment in terms of educational costs or otherwise, but to suggest to educators and school officials that here is a sadly neglected opportunity for tests and measurements which promises results more practically usable than do most of the measuring activities. There should be in every school system an equipment survey, not merely as a numerical or capital investment inventory, but in terms of educational effectiveness, of human values affected, of anatomical and hygienic suitability. Such a survey would not be difficult nor expensive. It would require no equipment other than record blanks. It could be conducted by the available personnel and instead of being a burdensome task would result in a knowledge of equipment values and uses which would make tasks easier and more effective. A direct result which would be worth many times the effort expended would be a rearrangement of the seating and a reassigning of the pupils to seats. Pupils and seats would be reassorted for appropriate sizing. Many of the most serious visual hazards would be eliminated by merely adjusting them to proper lighting conditions. Defects, small in themselves but large in their harmful influence on the educative process, would be scheduled for correction at minimum cost. Adjustable equipment would be effectively adjusted and movable equipment would be more intelligently moved. Where equipment is not adapted to

teaching methods, means would be found for changing it, or for adapting the methods to the equipment.

Surveying it does not make bad equipment good, but it does point the way to lessening the evil effects of it. In such surveys conducted in some cities and in many schools, numerous means have been discovered for reducing the extravagant wastes involved in handicapping the educational process by defective equipment. Some of these means were merely better ways of using the equipment provided and involved no expense or effort whatever. Other means included the exchange of equipment from room to room, minor repairs, and janitorial or maintenance servicing.

Rational Program of Replacement Purchasing

More significant in the financing of the schools is the substitution of a rational budgeted program of replacement purchasing for haphazard emergency buying. Aside from being bad business procedure, emergency buying of school equipment tends to perpetuate obsolete conditions by selecting new equipment to match up with the old. A carefully developed program begins with ideals for a thoroughly modern seating installation in every grade and room, regardless of whether purchases in the immediate future are for a whole new building, or merely to replace a few dilapidated antiques. One or two beautifully modern adjustable and movable units in a roomful dating back to the eighties, may seem to be startlingly out of place but they are an effective leaven in the lump and help to speed the day when teachers, pupils, parents, taxpayers, and officials will demand the best in every room for every child. For the best is none too good to help the modern American child carry the educational load imposed upon him. Better a dozen new units that set the pace of progress and make higher ideals tangible, than a hundred that are already obsolete and tie the school system to standards already discarded.

In practically every school system in the land the immediately urgent needs for equipment replacement far exceed the means available for the purpose. No survey is needed to find demands in excess of prospective replacement supply. This fact makes the comprehensive survey all the more necessary in order that actual expenditures shall meet the most urgent requirements and meet them most effectively; in order that occasional expenditures shall not be dissipated in haphazard patchwork, but shall progressively and systematically contribute to the complete modernization of the entire equipment. Replacement should be a gradual and continuous process, provided for in the annual budget as inviolably as are capital charges, repairs, and maintenance. Any large industrial organization which did not make systematic provision for depreciation and replacement of equipment would be regarded as headed for the rocks. And if permanency and progress are contemplated for the plant, each piece displaced would be replaced not by one like it, but by one as much better for the purpose to be served as it is possible to secure; not merely one that will perform an operation as it has been done but one which is readily adaptable to any improvements in the process which may be contemplated or even merely possible. Wise equipment investments are made with an eye on the future rather than on the past. New equipment already obsolescent is a sign of senility in an institution.

Determining What is Best for Each Use

A most important part of an equipment survey will be devoted to determining what is new, and what is best, for each use and why. Merely because something is new and seems good does not necessarily mean that it is good for a par-

¹An address before the National Association of Public School Business Officials, 1934 Convention in New York City.

ticular use. It may be for something else, or it may be good for nothing. There is no one type of seating equipment, for example, that is best for every classroom use. There may be one type best for each, and there are certainly many that are best for none.

The equipment qualities which contribute most to modernization of the plant, the values which constitute the efficiency of a piece of equipment as an educational tool, are often those which do not appear in the specifications. Specifications deal for the most part with commodity values, with the buying of steel and wood and joints and varnish. The qualities which are of incomparably greater worth are human values; contributions to the effectiveness of educational methods, cultural effects, and considerations of anatomy, physical welfare, and the conservation of vision.

Considerations of material, construction, durability, and fair price are assumable as preliminary to the selection of equipment. The facilities, manufacturing practices, reputation, and responsibility of the producer indicate and guarantee all such factors far more effectively than do specifications and samples.

Choice on the basis of adaptability to educational methods is a more complex problem because of varying opinions and the lack of any final scientific or authoritative criterion. Special weight should be given to the preference of those who must work with the equipment; for the craftsman may be able to work better with the tools he likes, even though they are demonstrably not the best. But teaching methods are changed with dizzying rapidity, and teachers even more rapidly. The preferences of teachers may be based on extremely limited experience, and that of supervisors on enthusiasms for a particular purpose without checking against all the factors involved. What a teacher thinks indispensable today, might be disappointing to her next term and wholly un-

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satisfactory to her successor. Fads are expensive in themselves and more so in their reactionary effect on genuine progress. Wide observation and broad (not necessarily long) experience should modify radical tendencies in selecting equipment, for equipment stolidly endures through endless mutations of practice and personnel. It is selected not for the present, nor for the past, but for the long future in which the child's nature and anatomy are the only pertinent predictable facts.

On the cultural side, styles and ornamental effects are transient, but genuineness, simple gracefulness, and adaptability to purpose are deathless. Crudeness, inferior workmanship, imperfect joints, rough surfaces, and shabby finish, anything which smacks of the cheap and shoddy; anything which indicates that a thing was made to sell rather than to serve, was bought for price rather than purpose, will do more to destroy innate refinement, the love of the true and genuine, than large expenditures for statuary and architectural façades can do to build it. Equipment need not be elegant nor expensive, but it must be genuine, honestly made, and finished.

Hygienic Aspects of School Seating

When we come to the question of posture, of physical hygiene, of effects on organic functioning and the levels of vital energy, of relations to light and the conservation of vision, there is no place for opinion, for preference, or for the turns or swings of teaching method or administrative programs. There is plenty of room for research, for experiment, for constructive thought, for progressively better practice; but all to one end and from one source of principles and data. The end is that pupils shall sit and shall form habits of sitting healthfully, comfortably, gracefully, and efficiently. Responsibility for this objective is inescapable in a civilization which has imposed upon its growing children a universal requirement of sedentary

schooling, in a civilization in which sitting is and will increasingly be the dominant physical fact of daily life. The one source of indisputable data and undebatable principles of correct seating is the divinely authenticated pattern of the human anatomy and its functional processes. Not diverse objectives but varying levels of ignorance account for the conflicting factors and claims in the designing of so-called posture chairs. Allowances must be made for the influence of tradition, for the lure of least resistance, and for the limitations of price and schoolproof construction. But modernization of seating equipment there cannot be which does not give primary consideration to anatomical demands and hygienic ideals.

Whatever the eddies and whirls of method in the educational current reading is, and will increasingly be, the major means of acquiring knowledge and stimulating thought, both in the years of schooling and throughout the life of intelligent folk. Persistent reading involves a tax upon the human visual equipment which evolution cannot and science has not provided for. The result is an appalling penalty in nervous strain and visual defects. The optical profession provides crutches for the visual cripples; the science of illumination increasingly relieves some of the dangers; but the inescapable anatomical fact is that serious eyestrain is inseparable from bad sitting posture and improper angles of light and vision. In a reading world, perils of vision cannot be escaped except by habits of reading in wholesomely erect position, with heads held level, glare eliminated, and reading matter held steadily at the height, angle, and distance most favorable to clear vision, optimum illumination, and the varying focal requirements of individual eyes. This is the current major problem of seating designers, as yet only tentatively solved. It is a *sine qua non* in the selection of seating equipment which is truly modern and forward-looking.

A Continuous Audit of School Accounts for Board Members

Dr. J. Leslie Lawing, Superintendent of Schools, Maryville, Missouri

School officials everywhere are experiencing difficulty in properly financing an adequate educational program. The drastic reductions in the available funds the past several years has caused board members to scrutinize carefully any expenditures other than the minimum essentials for operating the school. Members frequently ask, "Where do we stand financially?" or, "How will we come out at the end of the year?" These are natural questions to ask and ones to which the school executive should be able to give an intelligent answer.

Budgeting is practiced almost universally by school authorities. A budget protects the superintendent and also helps to sell the educational program to the school board and public. A budget cannot be the accurately planned document today, however, that it was a few years ago, because of the changed economic conditions. Prior to 1929 the receipts could be estimated with a fair degree of accuracy, but during the past four depression years the estimate has become merely a guess for the amount of receipts from many sources. It is a common experience to learn that some promised state aid is not forthcoming, or that the taxes are not being paid as well as estimated in the budget.

A set of forms was worked out and has been used successfully in one school system for the past five years, which answers the questions raised by board members and also serves as a

constant check on all the budget estimates, receipts, and expenditures. These forms are compiled and passed out each month one day

prior to the regular board meetings so that members may examine them carefully and at their leisure and be prepared to ask questions.

Month	General Control	Instructional Service	Operation	Maintenance	Fixed Charges	Capital Outlay		Auxil. Ag'ty. Gen. Fund	Total	Debt Service
						\$ 210.00	\$ 185.00			
July										
August										
September	400.00	3,900.00	350.00							
October	380.00	3,900.00	750.00							
November	380.00	3,900.00	600.00							
December	380.00	3,900.00	900.00	150.00						
January	390.00	3,900.00	900.00							
February	380.00	3,900.00	850.00							
March	380.00	3,900.00	850.00							
April	380.00	3,900.00	850.00							
May	400.00	3,900.00	300.00							
June	180.00	185.00	300.00							
Totals	\$ 3,860.00	\$ 35,655.00	\$ 7,370.00	\$ 400.00	\$ 2,071. \$ 250. \$ 950.00	\$ 50,566.00	\$ 19356.17			

TABLE I—The above budget expenditure estimate makes it possible for members of the board of education to see exactly how much money is to be spent each month for the major types of service. By comparing this with the figures in Table III, the situation can readily be visualized.

Four forms are used; one for the budgetary estimate of expenditures; another for actual receipts; a third for the expenditures; and a fourth for the total receipts, total expenditures, and the balances in each fund.

This budget expenditure estimate is based on the nine standard distributions of school accounting — general control, instructional service, operation of plant, maintenance of plant, fixed charges, capital outlay, debt service, auxiliary agencies, and co-ordinate activities. This sheet is a summary of the budget estimates, it is made when the budget is accepted at the beginning of the year and mimeographed so that a copy can be given the board members at each regular meeting during the year. This estimate serves as a control sheet within the bounds of which the superintendent should strive to keep. It justifies extra expenditures allowed in the budget but which are often forgotten by the members when the time comes for authorization. It also verifies the budget estimates used in Table II.

Table II shows the status of receipts for the year including the month of April for the years 1933 and 1934. This form has been in use for five years, so a comparison of the receipts might easily be made for all these years by turning back in the files. The compiling of the amounts in this table is very simple if the work is commenced at the beginning of the fiscal year, for then the amount received each month can be added to the totals of the previous months in each source.

Little study or knowledge of accounting is necessary for a board member to realize that the receipts of the school district shown in Table II are not so high for the school year 1934 as for 1933. He can see that the receipts have fallen off over \$8,700 and that only two sources of revenue have shown increases, delinquent taxes and state aid. A study of this form by itself would be just cause for a school-board member's worry because the amounts to date have fallen off about 10 per cent. This table shows the deficit in an exaggerated form; to get the proper perspective of the situation one must compare the expenditures of the two years. Table III clarifies this problem.

Table III is self-explanatory — it shows the budget allowance for April derived from Table I in the first column; the actual expenditures are shown in column two. Column three gives the amounts previously authorized by the board; column four gives the totals of columns two and three or the total amounts expended to date; column five gives the expenditures of the previous year to date; and column six shows where there has been an increase or decrease and the amount in each distribution.

This table serves to acquaint the board members with the various distributions of ex-

TABLE III Distributed Expenditures for April Comparisons Between the Years 1933-34 and 1933-34							
Distribution	Budget for April 1934	Actual Expenses April	Previously Authorized	Total Expense to Date	Expense 1933-34 to Date	Expense 1933-34 to Date	Increase or Decrease
General Control	\$ 360.00	\$ 374.92	\$ 3,002.00	\$ 3,376.92	\$ 4,064.89	\$ 4,064.89	-\$ 687.97
Instructional Services	3,800.00	3,771.74	27,283.66	31,055.40	34,939.09	34,939.09	-3883.69
Operation	850.00	802.81	5,768.66	6,590.85	7,369.14	7,369.14	-818.89
Maintenance		.63	484.51	485.14	470.88	470.88	+ 14.38
Fixed Charges			2,071.07	2,071.07	1,809.47	1,809.47	+ 261.60
Capital Outlay		223.95	319.45	548.40	232.79	232.79	+ 315.61
Auxiliary Agencies	100.00	100.00	731.84	831.84	910.63	910.63	- 78.79
Total General Fund	\$ 5,130.00	\$ 5,278.45	\$ 39,661.17	\$ 44,939.62	\$ 49,816.83	\$ 49,816.83	-\$ 4,877.21
Free Text Fund		\$ 377.37	\$ 2,150.44	\$ 2,527.81	\$ 1,902.94	\$ 1,902.94	+\$ 624.87
Debt Service Bond Interest, Sinking	\$ 9,374.17	\$ 9,374.17	\$ 9,984.00	\$ 19,358.17	\$ 18,787.26	\$ 18,787.26	+\$ 570.91
Building Fund			\$ 140.66	\$ 140.66			+\$ 140.66
Total All Funds	\$ 14,504.17	\$ 15,029.99	\$ 51,936.27	\$ 66,966.26	\$ 70,507.03	\$ 70,507.03	-\$ 3540.77

TABLE III—Statement of the distributed expenditures for a single month.

penditures in the accounting system. Columns one and two show how well the needs of the month were predicted in the budget preparation. A decrease of \$4,877.21 is shown in the costs of the general or operating fund; and even with the increases in amounts spent in the other funds there still remains a decrease of \$3,540.77 under last year.

All the increases of this year over last year should be explained to the satisfaction of the board. It is a good policy to forestall questions by frequent written explanations of conditions and pass them out with the tables and other board business at the regular meetings. To illustrate the meaning of the statement with figures, the \$261.60 increase in fixed charges is due to a change in writing the insurance policies from one- to three-year terms; the \$315.61 increase in capital outlay which is considerably more than the budget allowance may be accounted for in emergency allowances for CWA work during the past winter.

The amounts for this table are derived from the totals in the Voucher Register. It is necessary to add the amounts for the current month to the register before the payment of the bills is authorized, but where there is doubt about board sanction for some items, these and the totals should be entered in the register with a pencil until after the meeting.

The fourth part of the audit is shown in Table IV. This table gives the total receipts,

disbursements, and the balance in each fund as well as the total balance and the balances for the previous year. The amount in the total column for receipts should equal the total in Table II, \$89,994.59, and the total of the disbursements should equal the total for "Total Expense to Date," column four of Table III, which is \$66,966.26.

A study of the balances in each fund will help to clarify the financial situation of the school. After all the bills are paid, the balance shown is an index as to what can be expected for the remainder of the year. With \$14,493.52 in the general or operating fund and payments to be made for only one full month, and one month where the operating costs drop almost to the vanishing point, a board member can see that a nice balance will be carried over for the beginning of the new year, even though no further receipts are paid the district before the beginning of the new year in July.

Advantages of a Continuous Audit

The advantages of such an audit have been pointed out in the explanation of the tables. Among the advantages one might mention is the outstanding one, that of keeping board members informed at all times of the fiscal affairs of the district so that they may discharge their obligations intelligently. The superintendent keeps himself free from much of

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TABLE II Total Receipts And The Sources, April 1933 And 1934 Compared.		
SOURCE	1933	1934
Balance July 1	\$ 28,015.43	\$ 21,464.76
Taxes, Township Treasurer	45,553.94	41,019.13
Vocational Aid	2,474.12	1,863.26
Insurance Refunds	228.78	1.33
Railroad and Telegraph	4,373.92	4,016.80
Delinquent Taxes	5,599.64	10,011.67
Merchandise Taxes	2,661.94	2,605.73
State Aid	4,017.49	4,858.61
County Fund	864.82	577.76
Township Fund	1.39	14.00
Rural Tuition	2,361.00	1,677.50
Free Text (Foreign Insurance)	1,577.06	1,278.48
Refunds and Gymnasium Rental	43.80	10.00
Sale of Old Material	82.10	25.00
Dividend Defunct Bank	872.37 (3%)	590.56 (3%)
Totals	\$96,727.89	\$89,994.59

TABLE II—The exact status of receipts and sources of school income can be seen at a glance from this table prepared monthly.

TABLE IV Balances in the School Funds, April 1933 and 1934.				
Fund	Total Receipts	Disbursements	Balance April 1934	Balance April 1933
General	\$59,433.14	\$ 44,939.62	\$ 14,493.52	\$ 17,598.70
Bond Sinking	10,772.55	9,011.25	1,761.30	2,017.50
Bond Interest	17,031.01	10,346.92	6,684.09	6,988.64
Free Text	2,617.23	2,527.81	89.42	2,800.64
Building	140.66	140.66		140.66
Totals	\$89,994.59	\$ 66,966.26	\$ 23,028.33	\$ 28,946.14

TABLE IV—A statement of the available balances is of considerable help in gauging expenditures for the balance of a school year.

Recreational Planning in Relation to School-Plant Planning

George D. Butler, National Recreation Association

Recreational activities have come to be widely recognized as an essential part of a modern school program. Recreational planning, therefore, has become an important factor in the location and development of the school plant. Planning for recreation relates not only to school-plant planning but also to the educational program of the school.

Before the subject can be discussed intelligently, an understanding needs to be reached as to the meaning of recreation. Like education, the term "recreation" in our rapidly changing times is being reinterpreted. Recreation may be considered as forms of human activity in which the individual finds opportunities for self-expression and from which he derives relaxation, fun, pleasure, or recreation, whether of body, mind, or spirit. Participation in recreational activity is characterized by freedom of choice and also by the sense of satisfaction gained from taking part in an activity for its own sake. The term recreation is most frequently applied to adult activity, while play is applied to childhood experience. Since adult activity is most truly recreation, however, when it is engaged in the same spirit that characterizes play of children, the terms play and recreation may be considered as synonymous.

Nature and Scope of Recreation

The nature and scope of recreational activity are briefly indicated by listing some of its most characteristic forms. Among them are *games, sports and athletics; social activities such as parties, picnics, bridge clubs, and game evenings; manual and creative activities, including the arts and crafts; creative writing, conversation and story-telling; rhythmic activities such as vocal and instrumental music forms and in the various types of dancing; plays, pageants and puppetry; dramatic; nature study, gardening, and camping, and the various hobbies involving collecting.*

Planning for community-wide recreation involves consideration of the area, facilities, and equipment which are essential if people are to have an opportunity to engage in the activities previously listed. Some of the more important outdoor areas are children's playgrounds, neighborhood playfields, athletic fields, golf courses, bathing centers, neighborhood landscape parks, large parks, municipal camps, and outlying reservations. In these areas are provided facilities serving all ages and interests, some of the most common of which are playground apparatus, tennis courts, fields and courts for various games and sports, wading and swimming pools, running tracks, picnic, boating, and winter-sports facilities, nature and hiking trails, outdoor theaters, bandstands, and many others. Among the common forms of indoor facilities which are provided in community buildings, municipal recreation buildings, park field houses, and school buildings are the gymnasium, auditorium, club room, theater, workshop, library, arts-and-crafts room, swimming pool, music room, banquet hall, dance pavilion, social hall, bowling alley, billiard room, and special game room.

Relation of Recreation and School-Plant Planning

This brief summary of the various forms of recreation and of the common outdoor and indoor facilities required for these activities suggests the scope of planning for community recreation. The statement which follows, however, is restricted to the problem of recreational plan-

ning as it relates to school-plant planning. Therefore only those types of facilities which are likely to be included in the school plant will be considered.

In spite of the failure of many school authorities to give it a place in the school program, play is widely recognized by leading educators as an essential activity of education. Evidences of this fact are found in the introduction of play-motivated activities into the elementary-school curriculum, and the increasing emphasis upon extracurricular activities, many of which are recreational, in the junior and senior high schools. These developments have resulted in the widespread provision of play materials, gymnasiums, auditoriums equipped with stage and motion-picture projectors, playrooms, libraries, nature museums, arts-and-crafts rooms, swimming pools, and other facilities which have become recognized as desirable, if not essential, features of a school building. With the growing emphasis on games, sports, and play activities in the physical-education program, the playground and athletic field have also become recognized as essential. The increasing importance which has been attached to the wise use of our growing leisure presents a challenge to school authorities. The responsibility of the schools for training children not only for vocational activity but also in the development of skills and interests which may be useful in leisure time, has had an important part in extending the provision and use of these recreation facilities in the school plant. Many school systems have scarcely made a beginning, however, in providing for the recreational needs of their pupils. In spite of the splendid achievements of many school systems, much still needs to be done to improve practices in plant planning for school-recreation needs. Nevertheless, reasonably acceptable standards have been worked out for the recreational facilities which should be provided in the school plant *to serve school needs*. Therefore, in view of the fact that the program today stresses community relationships, this statement will be confined to the problems involved either in the school use of community-recreation facilities or the community use of facilities provided in the school plant.

The problems involved in this discussion are twofold; those relating to outdoor areas such as playgrounds, playfields, and athletic fields, and those relating to indoor facilities for recreation.

Legal Status of Recreation Areas

Before considering the planning of areas it is important that the legal status of different kinds of recreation areas be pointed out. Most public play areas which are not on school property, are located on areas which are dedicated as parks. "A park can be used only for a park use, which is recreation." A municipality cannot use a park for any other purpose without the consent of the legislature. Therefore, areas dedicated as parks are permanent additions to a city's recreational plant. Land acquired for school sites, on the other hand, is land taken for a public building and it can be sold at the will of the municipal or school administration. It does not have the permanent quality of a park. All school authorities are familiar with instances where portions of a school site, which have been developed and used for playground purposes, have been either sold or used for extensions of the school building. In rare in-

stances is more land acquired than is needed to provide an adequate play program for the children attending the school, at the time a school is erected. Extensions of the school building not only increase the need for play facilities, but at the same time reduce the available play space. There is no law which prevents this practice on the part of school boards. Therefore, any proposal that the playgrounds, playfields, and athletic fields of the community should be established on school sites should be subjected to very careful consideration because such a plan does not assure the permanency of these play areas. This is a phase of school and community planning for recreation which has not received adequate attention, but which is of primary importance to city planners and to recreation authorities.

An example of the failure to properly consider this phase of the problem is found in a recent article in one of the leading educational journals. It deals with the planning of an elementary-school site of four acres. The plan indicated that approximately one acre of this space was to be devoted to play purposes and its development was described in a section headed, "Large Playfields Provided." According to the article, the arrangement of the building and grounds was influenced by a proposed addition to the school building which would practically eliminate the already inadequate play area. It seems perfectly obvious that unless or until school authorities are ready to recognize a degree of permanency in playground areas in connection with school sites, city planners should consider carefully whether or not community recreation areas ought to be established on school property.

The Children's Playground

The children's playground is perhaps the most important and should be the most numerous of all public recreational areas. School authorities agree that each elementary school should have some outdoor play area — which means that school playgrounds should be more numerous than any other type of outdoor school area. There are various conceptions as to what constitutes a children's playground. However, the following description is suggested: A children's playground is understood to mean an outdoor area which provides opportunities for children, primarily between the ages of 5 and 15, to take part in the essential, fundamental, and enjoyable play activities. Due to inadequate planning, many neighborhoods have no children's playgrounds. Others have two or more play areas for children, usually small and inadequate. Satisfactory provision for children's play demands that each neighborhood served by an elementary school should have a children's playground. If the definition of a children's playground as cited above is accepted, it follows that the ages, needs, and interests of the children to be served by the playground are essentially the same, and approximately the same game areas and facilities should be provided, regardless of the place at which it is located or of the authority which administers it.

In many cities, school authorities have acquired large elementary-school sites, considerable portions of which have been developed for play purposes. The National Recreation Association has lent active support to the movement for the acquisition of large school sites, with the definite understanding that such areas should

be available under reasonable conditions for the use of all in the community. Before attempting to discuss just what facilities should be provided on the children's playground, or what size areas are needed, several questions should be raised relative to the establishment of the children's playground as a part of the elementary-school site. The answers to some of these questions seem to be obvious, whereas in the case of others the matter is definitely open to differences of opinion. As pointed out by J. W. Studebaker, United States Commissioner of Education, "It is often more important to find out what questions need to be answered than to be certain beforehand that the best answer will always be found."

Wider Use of School Playground

One question which has a definite relation to the establishment of a playground as part of the school plant is: "Will the school playground be open to the children, and possibly to young people and adults of the neighborhood, after school hours and during vacation periods?" We are all familiar with the school playground which is locked up as soon as school closes in the afternoon and which is not available for play during vacation periods. Fortunately this tendency on the part of school authorities is decreasing. There is a very real question whether the playground, which is admittedly needed in connection with the school program, should be provided as a part of the school plant if the school authorities are going to limit its use to school hours. Playgrounds on park and other municipal property are generally available for use during all reasonable hours throughout the year. Unless school playgrounds are to be available in the same way, it is to be asked whether the playground should not be established as a park or other municipal area adjoining the school plant but apart from it, in order that its continuous use be assured. In a number of cities schools have been established near existing parks or large municipal playgrounds. In other cities playgrounds have been established by city recreation departments adjoining school areas. Several cities have acquired property simultaneously for school and recreation purposes, part of it being dedicated to the school as a school site, and the title for the remainder being held by the city, the area being dedicated as a park. Under all these arrangements the school authorities have free use of the facilities provided on city property and, at the same time, these city areas are equally available at all times to community groups. It would seem reasonable to believe that some such scheme should be adopted in cities where the school authorities are not definitely committed to the maximum community use of school play areas.

Will Playgrounds Serve Play Interests?

Another important question which needs to be considered is: "Are the school authorities willing and ready to provide on the school playgrounds not merely the areas and facilities essential to the school physical education and play program, but also the other facilities which are important in order to serve all the play interests and needs of the children?" As has been pointed out, each neighborhood needs a playground which will provide all-round play opportunity for the children living in it. School authorities have been ready to establish on school play areas, ball fields, game courts, and types of apparatus essential to the school physical-education program, but in general they have not provided such facilities as wading pools, swings, facilities for quiet games, and other features, some of which are not essential to the school program but which have a strong appeal to children especially during the summer months. To assume that the schools will continue to provide some facilities and that the play needs of children will be met elsewhere,

presupposes a duplication of areas in the neighborhood. This very duplication has been perhaps the chief basis for criticism of existing provision for play and recreation and is a situation which every effort should be made to eliminate. In view of the high cost of land and of equipping, maintaining, and operating areas, such duplication cannot be continued. It seems obvious that there can be provided in every neighborhood only one children's playground, and that this should serve all of the various play needs of the children in the neighborhood. Unless school authorities are ready to accept responsibility for developing on the school sites these various facilities and areas, there would seem to be good reason for insisting that the responsibility for providing playgrounds should not be left in their hands.

Regardless of whether the playground should be developed on school or city property it is generally agreed that it should usually be established near the elementary school. City planning, school, recreation, and park authorities should co-operate in bringing about this end. Such co-operative planning has been undertaken in a number of cities. In Los Angeles, for example, a joint committee has been formed consisting of two members of the recreation board and of the school board together with an executive from each department, for the purpose of joint planning in the location of play areas. In Detroit, city-planning, school, and recreation authorities have co-operated closely in the placement of playgrounds and other recreation areas. Local conditions, personnel, and financial considerations will often influence the decision as to the control of the area, but the effective location of the children's playground is a co-operative matter which all interested agencies should work for. It is possible that in neighborhoods where elementary schools are widely spaced, an additional special playground for children may be needed.

Standards for Playgrounds

Granted that the playground should be established at or near the school site, what standards should be adopted with reference to its size and equipment? There has been much difference of opinion as to the basis on which children's play-space requirements should be determined. Some standards have been based on a certain amount of space per child, regardless of the number of children to be served; others on guesses as to the percentage of children in the neighborhood likely to be on the playground at any given time. The number and kinds of facilities and areas which should be provided also influence playground standards. The National Recreation Association recently worked out a comprehensive statement called *Space Requirements for the Children's Playground* in an effort to establish a sound basis for playground planning. It was felt that a reasonable basis for determining a satisfactory answer to the question, "How large should the playground be?" involved a study of the various play needs and interests of children and the space required, in order that they might be adequately provided for. In other words, planning should be based primarily on the child and his needs.

In arriving at the standard, the following essential requirements were taken into account:

1. Facilities for such games and activities as volleyball, playground baseball, soccer, handball, horseshoes. These are essential to school physical-education programs and are also popular play activities. Provision needs to be made not only for physical-education classes but also for after school and vacation periods.

2. Common types of playground apparatus, such as swings, slides, bars, rings, which, like game courts, are needed for both school and community use.

3. Facilities such as informal stage, tables and benches for crafts and quiet games, build-

ing-block platform, wading pool and sandbox, used for arts and crafts and for informal play activities.

4. Space is also needed for a shelter house unless the school building is used, for beautification, for circulation, for paths, and safety zones. In some communities, gardens should also be provided.

As a basis for determining the standard requirements, a neighborhood with 600 children 5 to 15 years of age was taken as a unit. The facilities, game courts, fields, and service features essential to caring for the play needs of this group of children were listed and their necessary space requirements determined. It was found that a *minimum* of approximately $3\frac{1}{2}$ acres is required in order to meet the play needs of the 5- to 15-year-old children to be served by the area.

The Proper Area of Playgrounds

An analysis of the detailed requirements, indicates a wide variation in space needed for different types of activities. The section allotted to apparatus serves a large number of children in a relatively small area. Likewise large numbers are served by the wading pool, handcraft and quiet-game areas, the sandbox, outdoor theater, and certain other features. On the other hand, a large space is needed for the team games which are so essential to the physical development of boys and girls and which also have possibilities in developing character and team play. *Approximately ten times* as much space is required for each child taking part in organized games and sports as is needed for the child taking part in the other activities on the playground. The space allotted to apparatus on this $3\frac{1}{2}$ -acre playground is only one fifteenth as much as is used for organized games and sports. It is clear that large numbers of children can be served in a limited program on a relatively small playground. However, if the *team games and other activities* which appeal strongly to children over 10 years of age are to be possible, relatively large areas must be provided for them. Unless they are provided, the power of the playground to attract children is definitely limited. The conclusion reached from the study is that a *minimum* of $3\frac{1}{2}$ acres are needed for a playground in every neighborhood where it is estimated that the present or future child population is approximately 600. If there is to be an opportunity for the playing of baseball, five acres should be provided.

Using the same method it is estimated that $2\frac{1}{2}$ acres are needed to care for the play needs of 300 children, whereas $5\frac{1}{2}$ acres will be sufficient for 1000 children.

Square-Foot Standard Insufficient

These conclusions illustrate the fallacy of determining space requirements in terms of square feet per child. If a group of children is to be able to play soccer or playground baseball, a soccer or ball field must be provided regardless of the number of children to be cared for. Likewise, if children are to have the opportunity to take part in a variety of play activities many different features must be provided regardless of the number of children in the neighborhood. As previously stated, $2\frac{1}{2}$ acres will satisfactorily take care of the play needs of 300 children, whereas $3\frac{1}{2}$ acres will take care of double that number. If a playground is to serve a larger number of children the area does not need to be increased proportionately. Some of the features will need to be duplicated and others somewhat enlarged. Total playground-space requirements vary directly but not proportionately with the number of children to be served. For example, the average number of square feet of playground needed for each child in a neighborhood with 300 children is 371, whereas for 1000 children only 233 are needed. In other words, the square-foot basis is not a

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PORTFOLIO OF MODERN SCHOOL BUILDINGS



GENERAL VIEW OF THE FLORHAM PARK PUBLIC SCHOOL, FLORHAM PARK, NEW JERSEY
Messrs. Rasmussen and Wayland, Architects, New York, New York

The colonial architecture which has been worked out in variegated red brick, gray limestone, new gray slate, and copper metal work, harmonizes with the generally high quality of the architecture in the community.

The Florham Park School: Its Program, *and the Place It Fills in the Community*

Geneva Prudden, Former Principal, Florham Park, New Jersey

The problem of providing grade-school facilities in the smaller community frequently resolves itself into producing a given number of classrooms with such other bare essentials necessary to make the building usable, at a minimum of cost, regardless of those broader, more comprehensive, and subtle elements which, consciously or otherwise, help to mold and fit the child to meet the problems of our present-day world. In my experience, extending over a period of many years, I have had an opportunity of observing both phases of the problem and am thoroughly convinced that the present school program of Florham Park and the new building which has been provided to house it is a decided advance in the right direction.

I believe the community, through its board of education, has pursued the right course from its inception when it was decided some five years ago that the school system should be surveyed with a view of fitting its work to present-day needs. When the help of Columbia University experts was enlisted, the first decided step in the improvement program was taken. This work has gone steadily forward under the able supervision of Hazel F. Mobray, an alumnus of Teachers College, Columbia University. It was natural, therefore, that in the development of the building plans a broader viewpoint and one fitted to the program of the school should be evolved. The completion of the new building makes it possible to carry out this program.

The School Program

The work throughout the eight grades is organized along the lines of the unit system. The

pupils are divided into groups which take up various units of study for the year, correlating into these units subject matter more commonly



THE LIBRARY IN THE FLORHAM PARK, NEW JERSEY, PUBLIC SCHOOL
has been fully equipped with books since the above picture was taken. The inlaid linoleum floor harmonizes in color with the attractive light brown of the furniture and the wall paneling. The walls have been tinted buff and the ceiling is white.



THE AUDITORIUM OF THE FLORHAM PARK, NEW JERSEY, PUBLIC SCHOOL
has been modestly carried out in buff and white. The room has been found to serve a wide variety of community uses.

referred to as arithmetic, reading, geography, history, art, and other subjects. Pupils in the sixth, seventh, and eighth grades have an opportunity to approach the high-school mark by the division of their work under various teachers and passing from time to time to various classes for their subjects as general science, art, French, English, recreation, etc. — in short, the old departmental system modernized.

The children assume responsibility and find great pleasure in the administration of their new building by having an active student council with weekly meetings and a junior police, directly co-operating with the borough police and traffic service; these student officials take direct responsibility without evasion under the direction of a member of the teaching staff. The patrons of the school and the general public share these experiences through news in the bi-weekly school newspaper, "The Florham Park Broadcaster." From the primary grades through the eighth, activities are in continual preparation and progress as there are no bounds for actual activity.

All school furniture is individual and movable so that there is ample space in the large classrooms for play, group work, and all the work of various types according to seasons, talents, and inclinations. The large and modernly equipped kindergarten or subprimary room is a notable feature, designed to pleasantly introduce the immature five-year old to his new social environment through activities with his fellow pupils.

Innovations Made Possible

In addition to the specialized work of the regular curriculum, much thought has been given to those broader features which seemed to be necessary in a community where all activities are centered in one unit. School clubs are a greatly stressed feature. These activities include aviation, sewing, dramatics and arts, and school orchestra. These features teach smooth contacts and co-operation between children of varying ages and direct the talents and superabundant activities of the adolescent into normal and varied channels. For the cultural and scholastic advancement of the youth this program has been evolved in the past few years and finds full expression in the new building.

In working out the program, consideration has been given to the possibility of broadening the curriculum in the not-too-distant future to

include junior-high-school work and this has been considered in planning the new building. The community purpose has had much thought, and in the introduction of the recreation suite, the library, and the assembly, features have been embodied which will insure their full usefulness.

The building of colonial architecture with Indiana limestone trim, a colonial-type brick, and Vermont green-slate roof, is set back 600 feet from Ridgedale Avenue at the crest of the knoll on a 21-acre plot presented to the borough by Miss Ruth Vanderbilt Twombly. The ample setback of the building eliminates street noises

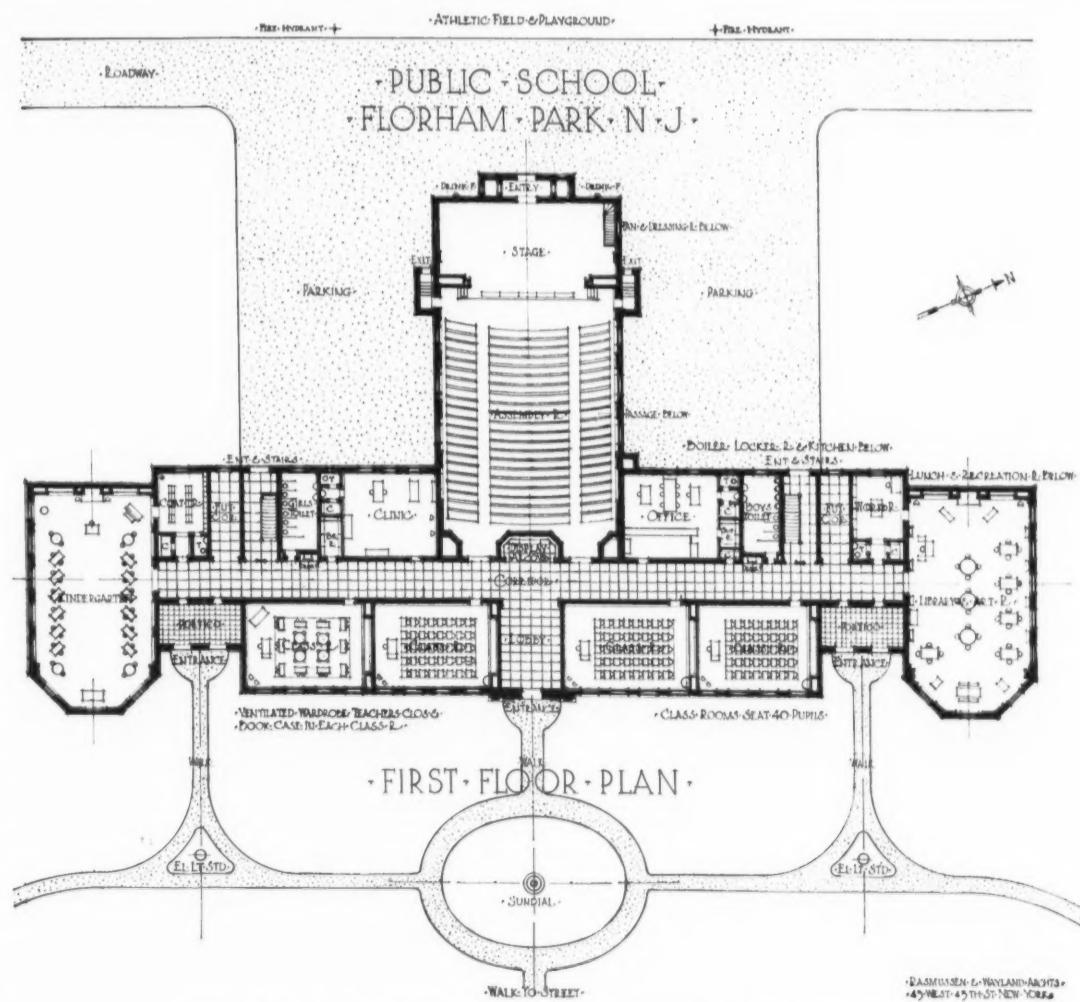
and traffic hazards, and the sweeping lawns dignify the approach.

The building is 269 feet long over all, and develops the entire frontage of the property; provision for all future extensions is arranged for at the rear. The central portion is two stories high, and the assembly, kindergarten, and library wings are one story, all with especially high ceilings. The walks from the three front entrances curving down to Ridgedale Avenue in graceful lines to the north and south of the plot with the flagpole, the sundial, and lamp standard as settings, make for a pleasing approach. The driveway is carried to a terminus in a parking space at the rear, which is provided with floodlights for use after dark.

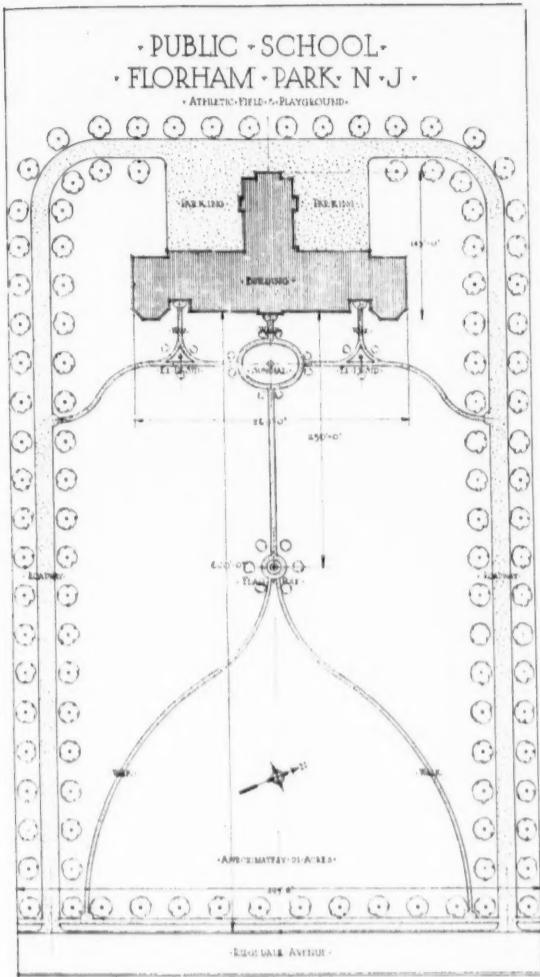
Provision has been made for playground apparatus, baseball, outdoor basketball, and tennis; the ample area of the site makes possible the development of other activities as the need arises. The planting and landscaping has been laid out with a view of adding to the natural attractiveness of the site and affording a pleasing setting for the building.

The slope of the lot has been utilized on the north end to provide a recreation room, together with locker and shower rooms and kitchen; this group affords space for physical training, lunch activities, community dinners, and adult gatherings. The active and co-operative Parent-Teachers' Association is sponsoring many activities in these rooms, including afternoon and evening dancing classes under a metropolitan teacher.

The building contains ten classrooms, an assembly seating 500 with projection booth, stage, and dressing rooms, a large library for community as well as school use, a kindergarten, a clinic, an office, and teachers' room with coat-rooms, storerooms, bookrooms, workrooms, and toilet rooms in connection. Eight of the ten classrooms have an east to south exposure, the kindergarten has the advantage of sunlight all day, and the assembly has both north and south exposure.



FIRST FLOOR PLAN, FLORHAM PARK SCHOOL, FLORHAM PARK, NEW JERSEY
Rasmussen & Wayland, Architects, New York, New York.



PLOT PLAN

The Assembly Hall

The assembly with its paneled walls, molded ceiling, graceful windows and lighting fixtures, woodwork finished in pastel colors, and draperies and furnishings in harmony with the whole, presents an air of dignity and good taste. The inclined floor with its composition tile provides a quiet finish. The acoustic properties of the room are excellent.

Special attention has been given to the lighting effects. The large colonial ceiling fixtures are arranged so that they can be partially or fully lighted. The exit indicators, the side wall lights, the lights in the entrance lobby are arranged on an emergency circuit controlled by double three-way switches from the booth, the stage, and the entrance to the assembly. The projection booth has special wiring for projection machines and sound apparatus, and a signaling system to the stage. The stage has recessed footlights and automatic mercury switches, also overhead border lights, floor and wall pockets for spots and special lighting effects, and dimmers to control the whole.

Library and Kindergarten Rooms

The library, a large and restfully furnished room will supply a long-felt community need and offers mental recreation and advancement with its carefully selected books, current periodicals, and reference material. The room is finished in Early American with circular-head windows, paneled walls, built-in bookshelves, and molded-panel ceiling. The colonial fireplace with Verde Antique marble facing adds a pleasing note. The quiet and attractive floor covering, window drapes and furnishings to harmonize with the finish, makes this room a charming retreat.

The exceptionally large kindergarten with its



THE KINDERGARTEN OF THE FLORHAM PARK, NEW JERSEY, PUBLIC SCHOOL
is the most attractive room in the building. The floor has colored inlays illustrating well-known characters in child literature.

ample coatroom, juvenile toilet, storerooms, toy cases, project lockers, drinking fountain, display and chalk panels in colors to harmonize with woodwork, embodies all of the features of a well-equipped and arranged room so executed as to attract the eye and delight and accustom the child to its new surroundings. The paneled walls, the jaspé linoleum floor colored to harmonize with woodwork, the gay-colored floor insets depicting nursery subjects, and the attractive lighting fixtures executed to represent alphabetical play blocks are useful as well as attractive to children. The colonial fireplace tiled in mat-glazed pastel green with insets of illustrated tile with lettered nursery rhymes and the careful and tasty working out of color schemes in the finish of the room as well as in the draperies and furnishings, will do much to make the transition from home to school pleasant and enjoyable.

Finish and Equipment

The building contains all those features of equipment and finish which go to make the modern school plant complete, attractive, efficient, sanitary, and economical to operate and maintain. The corridors are wainscoted in

mat-glazed tile with sanitary base in a mottled buff color. The floors are of terrazzo divided into small squares with brass dividers. They are wide, well ventilated, daylighted, and afford excellent circulation. Recessed drinking fountains are provided. The display and trophy cases are placed in the entrance lobby.

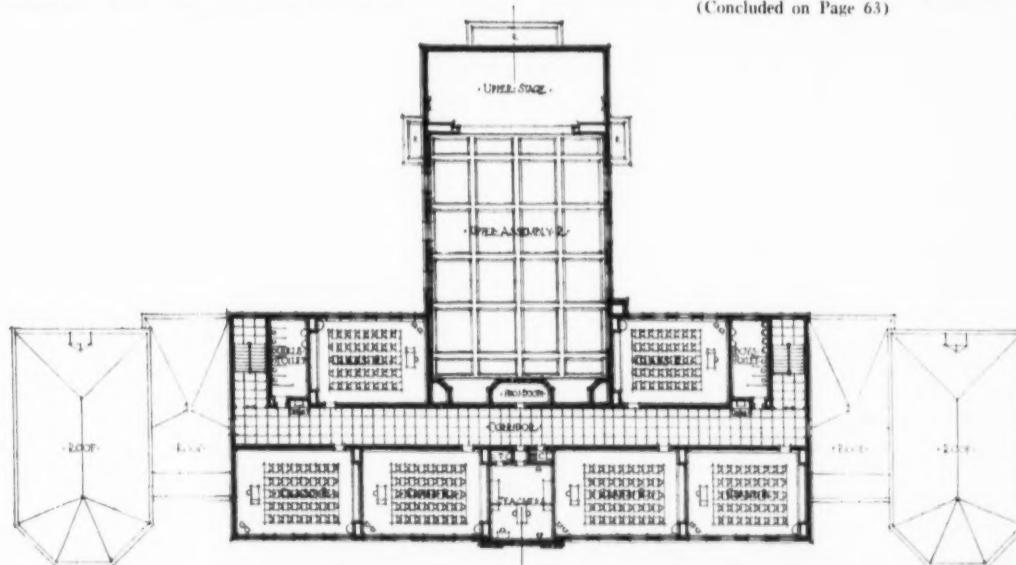
The stairways are of steel construction with nonslip terrazzo treads and are located in virtual fire towers at the end of the corridors, affording maximum protection from fire and panic.

Toilet rooms on each floor adjoin the stairs, the girls' located at one end and the boys' at the other. These rooms are finished with vitreous tile floors and mat-glazed wainscot, marble partitions, and exhaust fans to provide a constant air change. The equipment includes open-seat plumbing, vitreous ware fixtures, soap, paper towel dispensers, and waste towel containers, all finished in chrome plate.

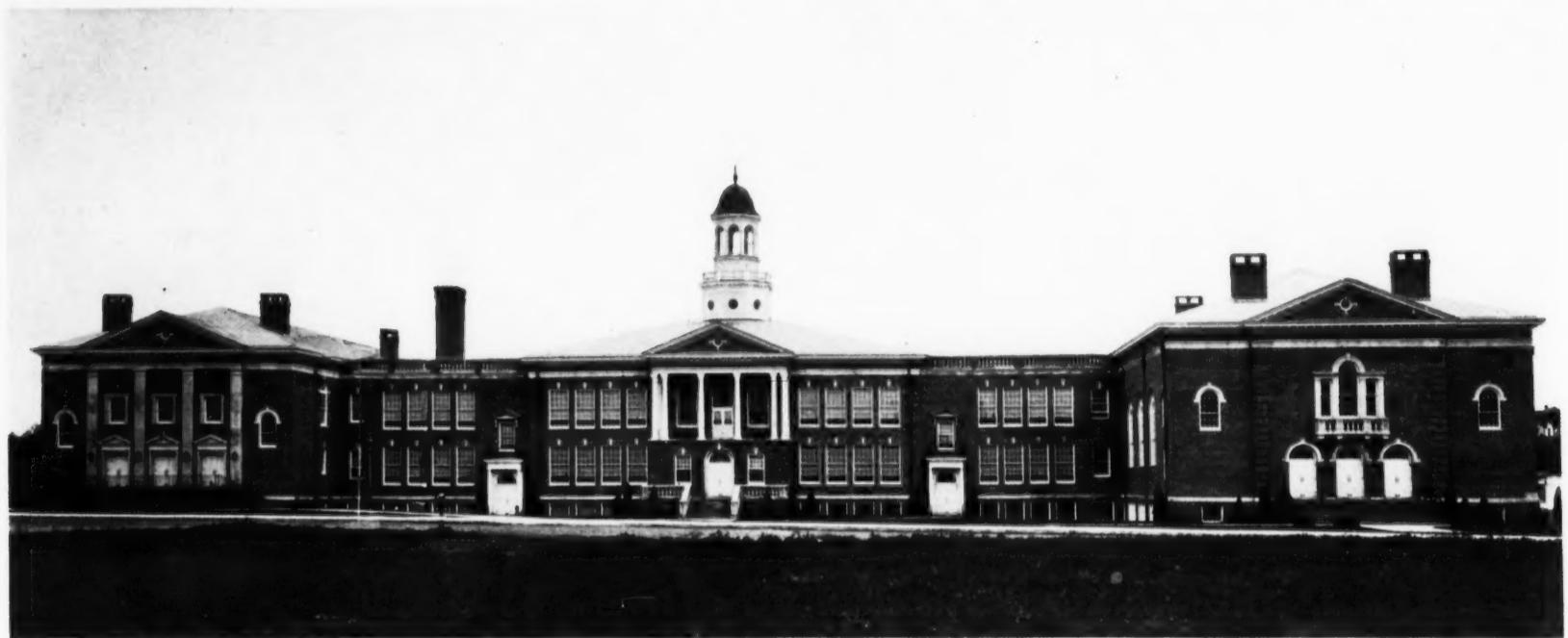
The clinic, located so as to be available for public as well as school use, is a completely equipped unit with piping, wiring, and furniture for a comprehensive medical program.

The office, located across the hall from the main entrance, is large enough for present and

(Concluded on Page 63)



SECOND FLOOR PLAN, PUBLIC SCHOOL, FLORHAM PARK, NEW JERSEY
Rasmussen & Wayland, Architects, New York, New York



THE POTTSSTOWN JUNIOR HIGH SCHOOL IS AN IMPORTANT ARCHITECTURAL AS WELL AS CIVIC AND EDUCATIONAL CENTER FOR THE RESIDENTIAL SECTION OF THE CITY

The Pottstown Junior High School

By F. M. Haiston, Superintendent, Pottstown, Pennsylvania

The Pottstown Junior High School carries out its slogan, "co-operation." Every member of the family works with fellow members like a beaver for the good of the whole school, believing that the manner in which one works alone is not half so important as how one co-operates with his fellow man. For that is an objective of every school: to train its youth to work and play together, since co-operation is one of the foundation stones of both happy family life and community life.

The junior high school is life itself, a real instrument for the molding of well-rounded citizens. In this school teachers try to understand that the school is for the boys and girls and not the reverse. Encouragement is substituted for despair, and naturalness for fear; interest is created in place of dictation, aiming toward happiness in their work.

The school, like other junior high schools, has an expansive and progressive course of study. In addition, every attempt is made to treat each child as an individual. In keeping with this idea, teaching is chiefly accomplished by means of the unit plan, largely with the aid of mimeographed assignments. Many of the units are of a co-operative nature to which several departments of the school contribute. The unit-assignment plan presents an opportunity for every pupil to go ahead at his own speed, and allows him to earn an extra credit by dramatizing some phase of the unit, by giving a floor talk, or by working up some special aspect of the unit.

Pupils are grouped homogeneously and divided into fast, medium, and limited-ability groups. A variable passing grade is used in order that the slow pupil may attain as much credit as the fast pupil, for the effort he is capable of putting forth. Completion classes, held at the end of the school day, present an opportunity for every child to complete his work before leaving the building. Restorative clubs, held during the period when the leisure-time clubs meet, offer an individual tutoring opportunity once a week, to pupils who have failed in a major subject during the preceding quarter. Pupils who need additional tutoring

may be given assistance by pupil members of the National Junior Honor Society.

In any school the best of the old education must be retained and utilized along with the best of the new education. Thus the emphasis on information which characterized the old school is still important in the new school. This school still feels the need of a sound foundation in the fundamental subjects. At the same time, wherever creative effort is possible, the opportunity is presented to the student.

Teachers are given an opportunity for self-improvement through the group study of the curriculum.

We are convinced that the educationally maladjusted child becomes the socially maladjusted child. Hence, an attempt is made to remedy educational maladjustments by a definite practical activity program. The activity program points toward a definite end which might be summed up in the motto "the preparation of youth for the responsibilities of life," taken from the Boston Latin Grammar School. In addition to some thirty leisure-time clubs, programs are provided in athletics, assembly programs, dramatic activities, music, and visual education.

The athletic program attempts to provide as many athletic recreational activities as possible, so that every boy and girl may be reached. Supervised outdoor play is stressed whenever weather permits. The interscholastic program is confined to a conservative number of games in football, basketball, and track, under P.I.A.A. rules. Girls do not engage in interscholastic contests. The following intramural sports are presented for girls: hockey, volley ball, handball, basketball.

The assembly program is arranged to properly observe the patriotic and special holidays as well as events of civic interest. Every child must appear in one or more programs before the entire school during the school year. These opportunities are made in order that the child may learn to stand on his feet with poise and express himself with ease.

Some of the most important activities of the school year are the dramatic projects presented

in the form of the Christmas operetta, the senior class play, and the commencement pageant. The school aims through these projects to set a higher standard in dramatic excellence, to cultivate dramatic tastes, and to teach discrimination. Through the training they receive, pupils learn to express themselves clearly and vividly and gain confidence and poise. The pageant presented at the annual commencement exercises gives every pupil an opportunity to participate rather than listen, the entire class working on the project that portrays the application of the objective in question as a part of their school life.

The school realizes the value of teaching appreciation of good music. A band and an orchestra are conducted, the former chiefly to promote school spirit at athletic contests; the second for assembly programs, class plays, pageants, as well as community entertainments. The vocal program is divided into boys' and girls' glee clubs and chorus work. Here again the pupils learn to work together.

In the visual-education program an attempt is made to present periodically throughout the year the best educational films obtainable, in significant subject fields.

Other activities in the school include the student council and the safety patrol. The council, an organization consisting of boys and girls elected from each homeroom, controls other school activities, issuing charters to the school clubs, editing the school handbook, and in general promoting the welfare of the school. The aim is to give the student body a chance to practice the responsibilities of citizenship as well as to encourage respect for the rights of others.

The safety patrol, an organization of sixty members, is a valuable asset to the school. The group has charge of traffic in the corridors and patrols street crossings and fire drills. In ten years of service the organization has not had one accident on the streets patrolled. The patrol court conducted by members of the patrol is held once a week. A safety-patrol drill team consisting of sixteen boys in this organization has received honors in Washington on two oc-

casions. A branch of the organization supervises the lunchroom.

Every progressive industrial plant has its personnel officer. The school has the counterpart of this officer in the guidance counselor. The department is one of the most important in the school. It is its job to guide and help the youth to live richer and fuller lives. Many problems present themselves to boys and girls of adolescent age. Problems of a disciplinary nature in which the child sometimes feels he is in the right and the teacher in the wrong must be solved. Difficulties between pupils, and between teacher and parent must be settled. New entrants must be classified, assigned an older brother or sister, and made to feel at home. Physical weaknesses must be noted and taken care of. Frequent tardiness and absence must be investigated, and calls must be made at the homes of those who have been ill in order that they may be assisted with their lessons. Much time must be spent in welfare work, supplying physical needs, such as clothing, gym equipment, and food. The counselor must co-operate with the P.T.A., the local service clubs, the faculty, and other relief agencies in this work. Monthly guidance programs must be constructed by the counselor as an outline to the teachers. The work of this department may be summed up by saying, that "as the aim of the junior high school is individual justice, the method by which it is accomplished is guidance."

The Construction of the Building

The Pottstown junior-high-school building has been planned for a normal pupil capacity of 1,500 in grades seven, eight, and nine. The building is designed in the colonial style and constructed of colonial-type brick, with Indiana limestone trim, and a metal roof. The interior construction consists of a structural-steel frame, steel joist, and concrete-slab floors.

The interior has been very carefully studied so that the finish is adapted to the special uses of each of the rooms. The corridors, auditorium, cafeteria, and shops have concrete floors; the classrooms, the gymnasium, and the offices have maple floors; the toilets have tile floors. The classrooms and other instructional areas have sand-finish plaster ceilings and walls. The toilets have tile floors and wainscots.

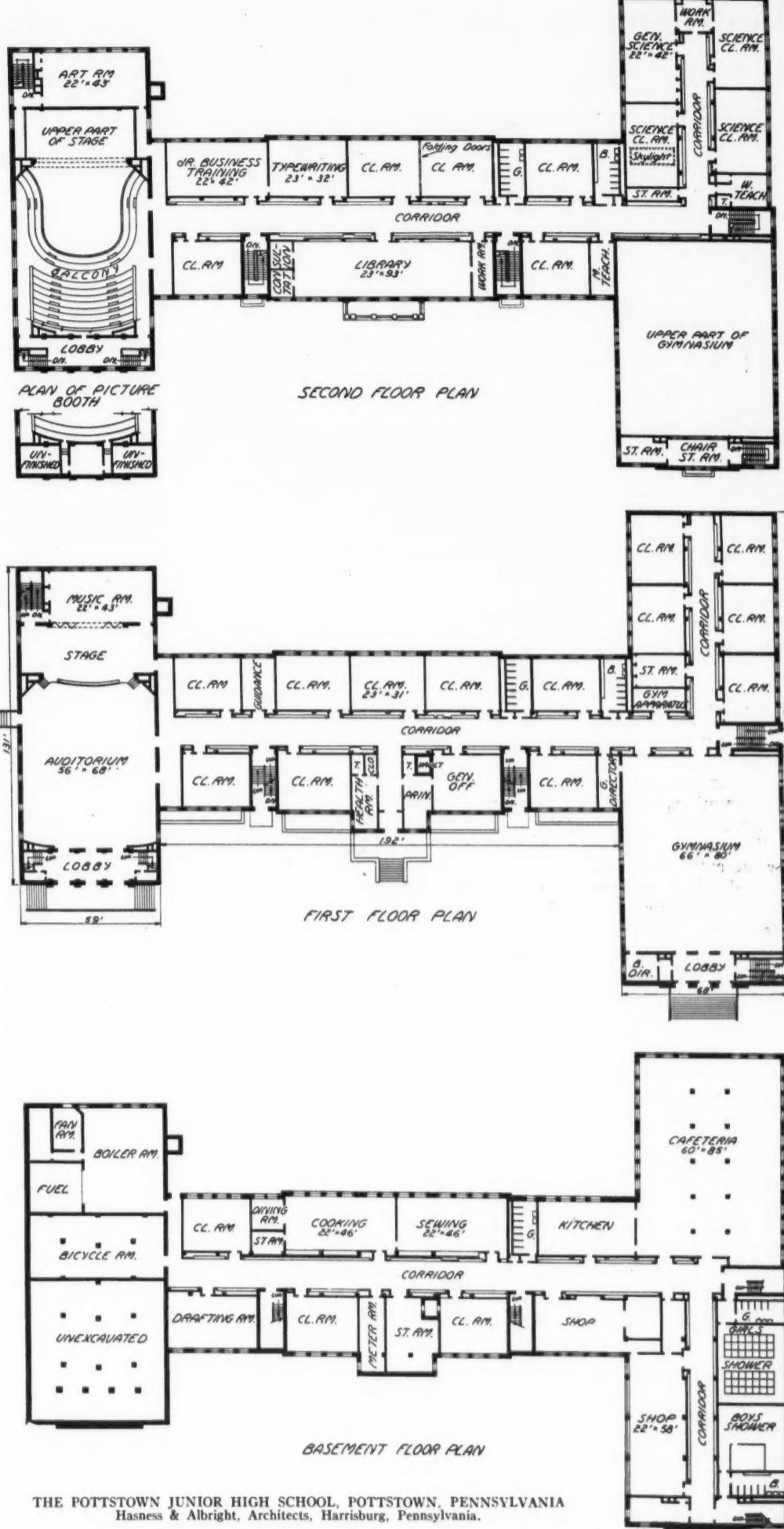
In the planning of the building considerable care has been given to secure ease of circulation and ready exit. This has been accomplished by the arrangement of stairs and corridors and the central location of the offices and other units which are frequently used. The classrooms, and the departmental suites have been grouped for reducing travel distance.

The library is centrally located and with its attractive colonial finish and its fine collection of books is the academic center of the school. Adjoining it are separate teachers' workrooms and pupil-conference room.

The classrooms devoted to social studies are arranged with folding doors, which can be opened so that visual instruction can be given to two class units at the same time.

The clothing laboratory adjoins the foods room which is divided into six unit kitchens, accommodating a total of 24 pupils. There is a separate demonstration dining room.

The music room has been carefully treated to control the sound so that it is neither too noisy nor "dead." The room is located in the rear as an extension of the auditorium stage, separated from the latter by means of folding doors. This arrangement prevents the sound from disturbing other classes and permits of the



THE POTTSSTOWN JUNIOR HIGH SCHOOL, POTTSSTOWN, PENNSYLVANIA
Hasness & Albright, Architects, Harrisburg, Pennsylvania.

enlargement of the stage for special occasions.

The cafeteria has been planned to accommodate 600 pupils in a 25-minute lunch period. Careful study has been made also of the arrangement and equipment of the room so that it may serve as a study hall in the morning and in the afternoon.

The shops provide for electrical work, sheet-metal work, and woodworking, and the suite includes a mechanical-drafting room.

The physical-education unit includes a gymnasium, boys' and girls' shower and locker rooms, a dressing room and shower for visiting

(Concluded on Page 65)

Techniques for Planning Small High-School Buildings

W. K. Wilson, Pb.D., New York State Department of Education

PART III—EXTENDING AN EXISTING BUILDING

This is the third and last in a series of articles, describing the development and use of techniques for setting up a schedule of recitation rooms for small high schools. The data used were collected from some 500 small high schools in New York State; and while it appears that the techniques can be made applicable to high-school building planning in any state, the formulas and tables of measures given in these articles are derived from educational practices in schools of 50 to 400 enrollment in New York State only.

The first article, Part I, published in the June, 1934, issue of the JOURNAL, described the development of the techniques and the derivation of the formulas and tables. Part II, appearing in the August issue, described the application of these techniques and measures to the determination of a schedule of recitation rooms for a new high-school building.

This article describes the use of these same techniques and measures in planning the extension of an existing building, where an increased enrollment or an enriched educational program demand such an extension.

Fundamental Steps in Program

In these procedures, four fundamental steps are involved, as follows:

1. Determining the enrollment to be housed.
2. Determining the educational program to be offered.
3. Setting up a theoretical room schedule to house the entire program.
4. Evaluating and writing off the existing facilities and determining thereby the new construction needed.

After the existing facilities have been evaluated and written off, the remaining room schedule will constitute the new construction needed. In most cases some minor changes in the existing room spaces, either in size, equipment, or assignment, will be necessary so that these spaces may yield a maximum utilization in connection with the new spaces provided.

In order to illustrate these procedures, an actual case that has only recently passed through the Buildings and Grounds Division is described in detail.

District A, located in a prosperous rural section of central New York State, was maintaining a combined elementary and high school of approximately 200 pupils in grades one to eight, and 300 pupils in grades nine to twelve. The school was organized on the six-six plan, with about 160 pupils in the six elementary grades, and 360 in the six-year high school. Approximately 70 per cent of the pupils in grades nine to twelve were nonresidents.

The educational program was fairly broad. Besides the college preparatory work, a full commercial course, music, drawing and art, physical education, and some home economics were given. The facilities for teaching these subjects were somewhat limited, however, and there were no provisions whatsoever for teaching either agriculture or industrial arts.

The high-school enrollment of this school had increased rapidly and steadily over the past decade. The increase had been due largely to an increased drawing power of the school over the surrounding area, although the local district itself had maintained an upward trend in high-school enrollment comparable to the state and nation. The location of the school makes it the logical center for an enlarged high-school area, with a strong possibility that it will soon be-

come the nucleus of a very large central rural-school district.

The Problem of Adequate Housing

In the light of these facts and trends, together with the already overcrowded condition of the building, as shown by a carefully made utilization study of the building, it became necessary for the board of education to begin to study the problem of providing more adequate housing facilities for their school.

After further careful consideration of enrollment trends and possibilities of centralization, it was decided to extend the present building to house 460 pupils in grades seven to twelve, and one grade group for each of the six elementary grades. Industrial arts and agriculture were to be added to the curriculum of studies, and more adequate administrative and non-recitational facilities were to be provided.

With the enrollment and educational program determined, the first step necessary in planning an extension to the existing building was to set up a complete schedule of recitation rooms to house this enrollment and educational program, disregarding for the moment any of the existing room spaces. This schedule as set up is presented in Table I.

TABLE I. Proposed Complete Schedule of Recitation Rooms for School "A"

Rooms	Teacher Stations	Units Each	Total Units	Total Pupil Stations
Classrooms, Grades 1-6.....	6	1	6	240
Classrooms, Grades 7-8.....	2	1	2	80
High-School Rooms				
Home Economics.....	1	2	2	24
General & Ag. Shop.....	1	1½	1½	24
Agriculture Rec.....	1	½	½	12
Elem. Science	1	1	1	35
Adv. Science	1	1½	1½	24
Typing	1	1	1	28
Drawing — Art	1	1	1	28
Recitation Rooms				
40-pupil	3	1	3	120
30-pupil	3	½	2½	90
20-pupil	3	½	1½	60
Library and Conf.....	1	2½	2½	60
Study Hall	1	1½	1½	60
High-School Totals	20		21	645
Grand Totals	26		27	885

In addition to the recitational spaces shown, it was recommended that a combined cafeteria-general-purpose room with a dining capacity of 120 to 150 be provided, and that more adequate shower and locker space for both boys and girls be included in any extension made.

Reassignment of Room Spaces

Following the setting up of a complete schedule of recitation rooms, the next step in planning the extension of the building was to evaluate and write off the existing room spaces. Table II shows a list of these spaces,

TABLE II. Pupil Capacities and Assignment of Existing Room Spaces

Room	No.	Floor	Dimensions	Capacity	Assignment	Cap. as Assigned
Elementary Classroom	4	Ground	22 x 28	35	Retained	35
Elementary Classroom	5	Ground	22 x 28	35	Retained	35
Elementary Classroom	14	Ground	22 x 28	35	Retained	35
Lunch	9	Ground	22 x 19	46		
Cooking	10	Ground	22 x 27	12		
Sewing	11	Ground	22 x 19	17		
Elementary Classroom	101	1st	22 x 28	35		
Elementary Classroom	102	1st	22 x 28	35		
Elementary Classroom	104	1st	22 x 28	35		
Elementary Classroom	105	1st	22 x 28	35		
Elementary Classroom	115	1st	22 x 28	35		
Music	—	1st	22 x 11½	15	Storage	—
Drawing	109	1st	22 x 11½	10		
Typing	110	1st	22 x 21	18		
Teachers	—	1st	22 x 11½	—	Retained	—
Clinic	—	1st	22 x 13	—	Retained	—
Latin	114	1st	22 x 30	40		
Study	202	2nd	22 x 60	80		
Library	203	2nd	22 x 15½	14		
English	204	2nd	22 x 30	40		
History	205	2nd	22 x 30	40		
Administration	—	2nd	22 x 22	—	Retained	—
French	211	2nd	22 x 22	30	Interchg. Recit.	30
Mathematics	214	2nd	22 x 22	30	Interchg. Recit.	30
Science	215	2nd	22 x 38	24	Advanced Science	24
Science Storage	—	2nd	22 x 11½	—	Retained	—

their room numbers, floor dimensions, floor level, pupil capacities, and future assignment.

As indicated in Table II, these spaces were reassigned as follows:

On the ground floor Rooms 9, 10, and 11 were assigned to home economics, with the recommendation that the present partitions be removed and the entire space be thrown into one room. If later on two teachers of home economics are employed, the space can be divided into two rooms, one for cooking and one as a combination living-dining room. Rooms 4, 5, and 14 were retained as elementary classrooms.

On the first floor, Rooms 101, 102, 104, 105, and 115 were retained as elementary classrooms, providing, with the three rooms on the ground floor, the eight classrooms needed for the six elementary grades, and the two homerooms for the seventh and eighth grades. Rooms 109 and 110 were thrown together to form the typing room, while Room 114 was retained as one of the three 40-pupil interchangeable recitation rooms required for the high school. The clinic and teachers' rooms were retained in their original locations on this floor, but the small music room was reassigned as a storage room.

On the second floor, Rooms 203 and 204 were thrown together as a library and conference room, while Rooms 204 and 205 were combined into one study hall. Room 215 was retained as an advanced science laboratory and recitation room, while Rooms 211 and 214 were assigned as two of the required 30-pupil recitation rooms. The administrative rooms and storage space were retained on this floor.

This assignment used up all the available space to the extent of 16 teacher-stations. According to the proposed classroom schedule 26 teacher-stations were required. Consequently an addition to this building which would bring the total room schedule up to that set up in Table I would include the following recitation spaces:

TABLE III. Schedule of New Rooms for School

Rooms	Teacher Stations	Units Each	Total Units	Total Pupil Stations
Agricultural and Industrial Shop	1	1½	1½	24
Ag. recitation	1	½	½	12
Drawing-art	1	1	1	28
40-pupil recitation	2	1	2	80
30-pupil recitation	1	½	½	30
20-pupil recitation	3	½	1½	60
Totals	9		7½	234

In addition to these spaces, the plans as submitted for approval showed additional shower and locker spaces for boys and girls, and a cafeteria as proposed in an earlier part of this

(Concluded on Page 63)

A Century of Progress in Schoolhouse Construction

Forest R. Noffsinger, Assistant, Bureau of Co-operative Research, Indiana University

Today fine school buildings, properly located and artistically designed, are accepted as a matter of course by school communities throughout the land. Few are those who remember, while admiring a modern schoolhouse, the long, slow process by which the rude one-room log schoolhouse has developed into the magnificent edifice of the present day. It is the purpose of this article to present the stages in this development with respect to orientation, type of building, architectural design, general structure, entrances, stairways, and corridors.

Early Ideas of Orientation

The earliest schoolhouses were built with little concern for the direction from which light was to be admitted. With the advent of glass windows, it was thought that to secure the maximum of light in the schoolroom the windows should be on the east and west sides. The first mention of the principle of orientation in the literature on schoolhouses was found in a letter written by Samuel Howe to Horace Mann in 1838.¹ Howe suggested that the schoolroom should be arranged in such a manner that the sunlight could be admitted from the "right" direction. Potter and Emerson² in 1842 designated what was the "right" direction by stating that the north end of the room should be a dead wall, the front of the building should be to the south, and the light should be admitted from the east and west. One of the important factors in the arrangement recommended was the desire to have the pupils face the north in order that they might get a correct view of geography.

Barnard's extensive work on *School Architecture*³ published more than a decade later contained no discussion on orientation. In 1855, Burrowes in *Pennsylvania School Architecture*⁴ emphatically warned against having pupils face an unshaded window, and recommended the orientation given by Potter and Emerson. Wickersham in 1864,⁵ Smithmeyer in 1866,⁶ and Chase in 1868,⁷ concurred with the 1842 standard of Potter and Emerson.

In 1876, however, Gardner, in a series of articles in the *New England Journal of Education*,⁸ claimed that light from the north was steadiest and softest and that the beneficial effects of sunlight could be secured in the schoolroom during the hours when school was not in session by introducing on the south side of the room windows supplied with good curtains. Gardner's idea soon gained wide acceptance among authorities in schoolhouse construction, the most influential of whom was Clark who in 1880 wrote *Rural School Architecture*⁹ for the United States Office of Education. State boards of health of Michigan in 1880,¹⁰ of Indiana in 1883,¹¹ in 1884,¹² and in 1885,¹³ and of Tennessee in 1885¹⁴ approved north and south light for schoolrooms.

The orientation of schoolhouses containing several rooms was considered a difficult problem and evidently little effort was made to secure proper light in all rooms. Not until 1885 was a solution to the problem proposed. Philbrick,¹⁵ in that year, published a Circular of Information for the United States Bureau of Education in which he advocated so placing the building "that the corners of the structure shall point to the cardinal points, thus bringing the sides which receive light to face the southeast and northwest, and northeast and southwest," and allowing the admission of sunlight in every window at some time of the day. A number of authorities, including Hunt in 1886,¹⁶ Marble in 1891,¹⁷



DOBBIN'S SCHOOLHOUSE: THE OLDEST SCHOOLHOUSE IN PENNSYLVANIA
"Dobbin's Schoolhouse" in Gettysburg, Pennsylvania, is the oldest building erected west of the Susquehanna River for school purposes. It was built in 1774 at the order of Rev. Alexander Dobbin for school and living purposes and was used as a boarding and day school until 1801. During the Battle of Gettysburg the Union forces used it as a shell-proof hospital on account of its heavy stone construction. Of the original school a local historian has written that "it gained a wide reputation for thoroughness of instruction and excellence of management."

and Young in 1891,¹⁸ mentioned the plan suggested by Philbrick. But gradually convention brought about a disregard for the peculiar arrangement of the building, and emphasis was placed upon the need for light from the north, northeast, and east, and for admission of sunlight at some time during the day. Dresslar, writing in 1899,¹⁹ strongly advocated rooms with east light because of the "early sunning which they will get."

By 1900, there was still little agreement among authorities on the subject, although there was a disposition to compromise between the steadiness of north light and the beneficial effects of the sunlight from south windows. The accepted standard today gives preference to lighting of main classrooms of school buildings from the east and southeast, with southwest, west, and south next in order of preference. North light should be avoided except in drawing and art rooms, and in latitudes where bright sunlight prevails.

Position of Building on Site

In the years before 1855 there seemed to be little uniformity in the decision by school authorities as to the position of the building on the school lot, although many statements in the discussion on the location of the site might be interpreted to mean that the building should be located far back on the school lot. From the prevailing practices, however, it is safe to assume that a "retired position" referred to the site rather than the building on the site. The desire to locate the building far back on the lot, according to Burrowes,²⁰ arose from the need to "escape noise and secure uninterrupted attention to study." Many authorities required the location of the building about one third of the distance from the front to the rear of the lot and on a line running through the center of the lot. The State Superintendent of Maine in 1896²¹ introduced the idea that the building should be located to provide a "sunny playground," while Dresslar in 1899²² added the requirement that the building be so located on the lot "as to disturb as little as possible the usefulness of the playground." Since 1900 there has been added to the list of principles only one further requirement, that the building be so arranged on the lot that any further additions to the school building will not seriously infringe on the playground space.

Type of Building

From the erection of the first general tax-supported school in Dedham, Massachusetts, in 1649,²³ to the beginning of the nineteenth century the type of building used for school purposes changed little. Of course, it must be remembered that many of the schools during this period of a century and a half were held in buildings not erected espe-

¹Howe, Samuel C., "Letter, 1838," *Life and Works of Horace Mann*, Vol. 2, p. 571. Lee and Shepard, Boston, 1891.

²Potter, Alonzo and Emerson, George B., *The School and the Schoolmaster*, p. 532. Harper and Brothers, New York, 1842.

³Barnard, Henry, *School Architecture*, Charles B. Norton, New York, 1854. 464 pp.

⁴Burrowes, Thomas H., *Pennsylvania School Architecture*, pp. 29-31, 178, 255. A. Boyd Hamilton, Harrisburg, 1855.

⁵Wickersham, James Pyle, *School Economy*, p. 7. J. B. Lippincott, Philadelphia, 1864.

⁶Smithmeyer, J. L., "School Architecture," *Indiana School Journal*, 11:282-3, August, 1866.

⁷Chase, O. Thurston, *A Manual of School-Houses and Cottages for the People of the South*, p. 29. Government Printing Office, Washington, D.C., 1868.

⁸Gardner, E. C., "School-House Architecture," *New England Journal of Education*, 3:109, March 4, 1876; 3:133-4, March 18, 1876; 3:169-70, April 8, 1876; 3:206-7, April 29, 1876; 3:230, May 13, 1876; 3:265-6, June 3, 1876; 4:26-7, July 8, 1876; 4:50, August 12, 1876.

⁹Clark, T. M., *Rural School Architecture*, pp. 15-33. U. S. Bureau of Education, Circular of Information, No. 4, 1880.

¹⁰Lundy, C. J., "Light in the Public Schools, and School Life in Relation to Vision," *Eighth Annual Report of the Secretary of the State Board of Health of the State of Michigan for the Fiscal Year Ending September 30, 1880*, p. 28. W. S. George and Co., Lansing, 1881.

¹¹State of Indiana, "Schools and School Houses," *Second Annual Report of the State Board of Health of Indiana for the Fiscal Year Ending October 31, 1883*, pp. 30-1. William B. Burford, Indianapolis, 1884.

¹²Hibberd, James F., "The Sanitary Conditions and Necessities of School-Houses and School Life," *Fourth Annual Report of the State Board of Health of Indiana for the Fiscal Year Ending October 31, 1885*, pp. 219-27. William B. Burford, Indianapolis, 1886.

¹³Berg, D. N., "Some Defects in Our School System and School-Houses," *Fourth Annual Report of the State Board of Health of Indiana for the Fiscal Year Ending October 31, 1885*, p. 240. William B. Burford, Indianapolis, 1886.

¹⁴Wright, Daniel F., "School Hygiene," *Second Report of the State Board of Health of the State of Tennessee, October, 1880-December, 1884*, p. 228. Albert B. Tavel, Nashville, 1885.

¹⁵Philbrick, J. D., "School-Houses," *City School Systems in the U. S.*, p. 174. U. S. Bureau of Education, Circular of Information, No. 1, 1885.

¹⁶Hunt, Ezra M., "The School and Its Appointments," *Principles of Hygiene for the School and the Home*, pp. 289-90. Ivison, Blakeman and Co., New York, 1886.

¹⁷State of Pennsylvania, "School Hygiene," *Seventh Annual Report of the State Board of Health and Vital Statistics of the Commonwealth of Pennsylvania, 1891*, pp. 589-99. Edwin K. Meyers, Harrisburg, 1892.

¹⁸Young, A. G., "School Hygiene and School-Houses," *Seventh Annual Report of the State Board of Health of the State of Maine, 1891*, pp. 243, 260-2. Burleigh and Flynt, Augusta, 1892.

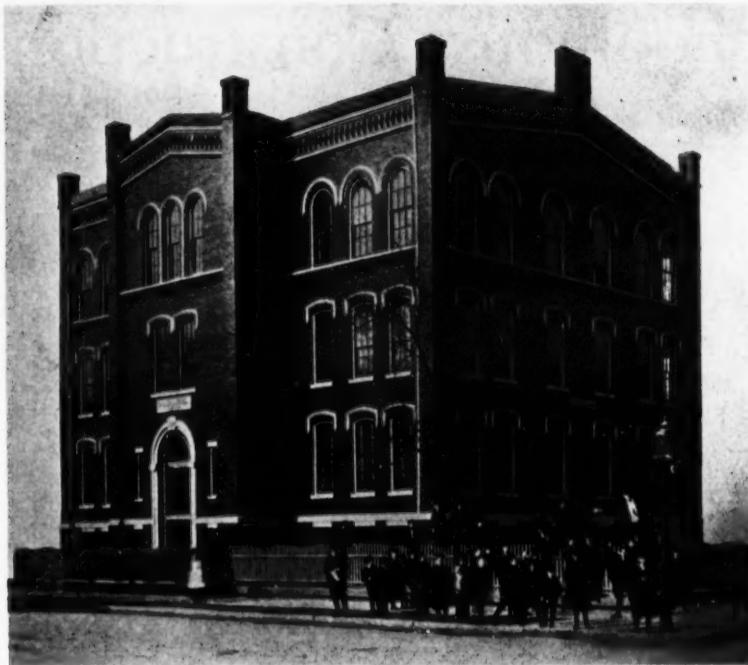
¹⁹Dresslar, F. B., "Notes on School Hygiene," *Nineteenth Biennial Report of the Superintendent of Public Instruction for the School Years Ending June 30, 1899, and June 30, 1900*, pp. 31-3. A. J. Johnson, Sacramento, Calif., 1900.

²⁰Burrowes, T. H., *op. cit.*, pp. 253-5.

²¹State of Maine, "School Yards and School Buildings, Designs, Plans and Recommendations," *Report of the State Superintendent of Common Schools of the State of Maine for the School Year Ending June 1, 1896*, p. 92. Burleigh and Flynt, Augusta, 1896.

²²Dresslar, F. B., *op. cit.*, p. 44.

²³Johnson, Clifton, *Old-Time Schools and School-Books*, p. 6. Macmillan Co., New York, 1904.



THE BROWN SCHOOL, CHICAGO, ILLINOIS

The building was erected in 1867 and was one of the earliest corridor schools in the middle west. The present photograph, which dates from the early nineties, By courtesy of Bureau of Research and Building Survey, Chicago Board of Education.

cially for school purposes. There was much variety in the type of quarters used for school purposes but not designed for that purpose to as late a date as 1850. But the buildings specially designed for schools were invariably square or rectangular-shaped buildings containing one room, with an entrance door in the gable end of the building, windows of a kind on two sides, and a fireplace opposite the door. In most rural communities and even in many towns the buildings were similar in all respects to the simple log cabins of the pioneers. These pioneers according to Newlin²⁴ "found it necessary for the advancement of industry and true godliness that all the youth should be taught reading, writing, and the principles of their Christian religion." For this need it is evident that the simple structures erected were sufficient.

A Pioneer Schoolhouse

An excellent description of the early pioneer schoolhouse was given by Willard in the 1882 report of the Illinois State Superintendent.²⁵ The description follows:

For the first school house, the settlers met with a yoke or two of oxen, with axes, a saw and an auger; no other tools were necessary, though a fow or tool for splitting out clapboards was desirable. The first settlements were never in the open prairies, but always on the skirts of timber land or in the woods; the school house had the same location. Trees were cut from the public lands; rough-trimmed and unhewn, they were put together to make a log house, generally sixteen feet square; a hole was cut on one side for a door; a larger hole on the other side to allow the building of an outdoor chimney. The roof was made of clapboards, roughly split out, which were held in place by "weight poles" laid on the ends of the clapboards and secured by pins or otherwise. Three or four days' labor might be enough to do all this and to add the chimney and the furniture; the walls and the roof, with a fairly numerous company, would require but the second day. . . . The next step was "chinking and daubing." The spaces between the logs were filled out with chips and bits of wood; then clay or surface mud was daubed upon this filling, both inside and outside, until all openings were closed, and light and weather excluded. . . . On at least one side the space between two logs would be left open to admit light; and this window would be closed by greased paper to exclude the rain and snow; or a plank or hewed "puncheon" might be hung so as to act as a shutter. Sometimes a few small panes of glass were set in the opening. A school house in Schuyler County, in 1835, had leather flaps for shutters. It is noted as a great rarity that a school house in Edwards County had a real glass window as early as 1824. Sometimes no opening was left; or it proved insufficient, and part of the roof was left movable, so as to be raised on dark days. The door was made of clapboards or slabs split thin, put together with wooden pins; and it was hung on wooden hinges that creaked distressingly. Generally the floor was the natural earth; or perhaps a layer of firmer clay was laid and packed down hard. Sometimes a floor of puncheon (that is, logs split and hewed somewhat smooth on the inner side) was laid; such a luxury belonged to the more ambitious houses. . . . A ceiling under the roof was another luxury; if made, more clapboards were stretched from joist to joist; or, in at least one case, bark from linden tree was used, and earth was spread on this to keep out the cold. The chimney was large, six feet or more in width, set outside the house; it was even made so wide as to occupy all of one end of the house. Sometimes there was no chimney; a hole was left in the roof in Greek

and Roman fashion, and a board was provided to be set up on the windward side of the opening, and shifted from side to side as the wind might vary. The chimney was built of small poles, and topped out with sticks split to the size of an inch or two square, laid up in log-house fashion; then its clinks were filled with mud. Inside a liberal bank of sod was laid to protect its woodwork from the fire; or, with great labor, often times, stone was procured for that purpose. We read of a house which has a ceiling with a chimney starting from the joists, and thus built inside the house; this gave access to three sides of the fire. Stones or logs were used for andirons; a clapboard was the shovel; tongs, there were none. The fire must be kindled by the aid of flint, steel and tinder, or coals must be brought from the nearest house. Firewood was cut four feet or more in length, and was generally green, fresh from the woods.

In the cities, these simple one-room one-story structures were used in each of the various districts to provide for the children of that district. As population increased and the need for more accommodations became apparent, another room was provided by the addition of a second story designed exactly like the first.²⁶ In New York City and other places where the monitorial system was in use, small recitation rooms were added to the one large room and in some cases living quarters for the master were provided. The first school building erected in New York City in 1809 by the Public School Society²⁷ followed this plan.

Early Corridor Schools

The first instance, in the literature on schoolhouses, in which mention was made of corridors is found in the description of the first public schoolhouses erected in Cincinnati as a result of an 1829 act of the Ohio legislature.²⁸ The City Council divided the city into ten districts and in 1833 erected the first of the ten buildings, all of which followed the same general plan. There were "two rooms in each story, divided by passages running across the house, and a separate entrance at each side for boys and girls."

Larger schools were erected in the more congested areas of the East. They were all built on much the same plan with two or three stories, each story being divided into one large schoolroom with two small recitation rooms and a stairwell at each end. Examples of this type were the Jefferson Grammar School-House in Philadelphia in 1836;²⁹ the Chicopee, Massachusetts, building in 1840;³⁰ the Brimmer Grammar School of Boston in 1843;³¹ the grammar schools of Providence, Rhode Island, built earlier than 1846;³² and the Ingraham building of Boston in 1847.³³

The Latin and English High School of Boston, erected in 1844,³⁴ represented a general plan for high schools followed with slight variations for several decades. The building was three stories in height, each floor containing two rooms on each side of a 14-foot corridor having a small wardrobe room at each end and two stairways in the central part.

The Quincy School, erected in Boston in 1847,³⁵ represented a new type of arrangement, the principles of which have lived to the present time. It was in no sense a modification of any previously existing plan. There were four rooms on each of three floors and a large assembly hall on the fourth floor. Two wings at opposite sides of the building provided space for entries and stairs and, connecting these two wings, was a corridor on each side of which were two rooms. Each classroom contained space for 55 pupils, just enough to be managed by one teacher. Thus recitation rooms were eliminated and more children were provided for with a given amount of floor space.

Early Philadelphia and New York Schools

Philadelphia developed another type of building in the construction of three new elementary buildings in 1852. The Glenwood School³⁶ was very much like the grammar schools of Providence, having two rooms to each floor and a wing added for entrance and stairs. But a new departure consisted of a partition between the two rooms, constructed of glass; an outstanding feature of the Philadelphia schoolhouses for several decades. The Warren School,³⁷ a three-story building with four rooms on each floor, was only a combination of two units, each exactly like the Glenwood School. The partitions separating the four rooms were of glass. There was no corridor. If more room was needed, a slight modification was necessary, as was illustrated by the North East School.³⁸ Between the two units was inserted a large entrance room and the stairs which were transferred from the end wings. This entrance extended to the center of the building where there was a glass partition beyond which was a fifth classroom.

(Continued in January)

²⁴State of Pennsylvania, *Report of the Superintendent of Public Instruction of the Commonwealth of Pennsylvania for the Year Ending June 1, 1877*, pp. 481-2. Lane S. Hart, Harrisburg, 1878.

²⁵Willard, Samuel, "Brief History of Early Education in Illinois," *Fifteenth Biennial Report of the Superintendent of Public Instruction of the State of Illinois, 1882-1884*, pp. c-cii. H. W. Rokker, Springfield, 1884.

²⁶Barnard, Henry, *op. cit.*, p. 249.

²⁷Barnard, Henry, *op. cit.*, p. 206.

²⁸Ibid., pp. 142-59.

²⁹Ibid., pp. 177-89.

³⁰"Latin and English High School House, Boston," *Barnard's Journal of Education*, 12:551-2, December, 1862.

³¹Barnard, Henry, *op. cit.*, pp. 202-3.

³²Ibid., p. 253.

³³Ibid., pp. 251-2.

³⁴Ibid., p. 251.

The Relation of the University to the Public-School Superintendent¹

C. R. Maxwell, Dean, College of Education, University of Wyoming

It has been stated by persons unacquainted with our educational program that the universities have little knowledge and less sympathy toward the problems that confront the superintendents of public schools. It is unfortunate that many persons engaged in educational work still feel that the university wishes to dominate and dictate policies to the public schools; that its chief interest is to hand down edicts relative to the preparation of high-school graduates for university work. One who is conversant with the attitude of the state universities and colleges fully appreciates that, if in the past there was a desire on the part of higher institutions to outline definitely and specifically the subjects of study that should be required for college entrance, such an attitude no longer obtains. Our state universities now recognize that the educational problems confronting school superintendents and administrators of higher institutions are similar in type but different in complexity. A school superintendent supervises the educational program of pupils in the first twelve grades, and the university carries them on through the next four and in their graduate work beyond these years. A state university supported by public funds is an integral part of the public-school system. Its area of effort is different, but it should recognize the fact that pupils who have completed the first twelve grades are eligible to continue their work in the thirteenth grade in a university, just as the pupil who has completed the work in the sixth grade is eligible for the seventh, or that one who has completed the eighth is eligible for the ninth. The work throughout all the years of the public-school system should be integrated, and through conferences, discussions, and visitation of persons from the different areas, a better understanding of this relationship will accrue.

The Wyoming System

The situation in Wyoming is much simpler than that in many other states, as we have only one higher institution. The state university includes the Colleges of Liberal Arts, Agriculture, Engineering, Education, and Law. In most states, there are separate institutions to perform the same functions as do our colleges within the University. In this period when it is difficult to secure adequate financial support for higher education, we are particularly fortunate in having this unique organization. Many of our sister states have been impressed with the wisdom of the electorate in not separating the University of Wyoming into units scattered over different sections of the state. In most states, such differentiation has been due to political pressure with no thought of developing a unified educational program. In these states one of the handicaps in securing adequate appropriations has been the suspicion and jealousy of one state institution toward another. This has sometimes caused bitter conflict between supporters of different types of higher institutions. Such animosities have been a barrier to the program of higher education. In Wyoming, we avoid such jealousies and can better organize a consistent program that limits greatly the burden of support of higher education in a state of sparse population.

The university has had a liberal point of view in its relation to the schools of the state,

as any graduate of an accredited high school is admitted. This policy has sometimes been criticized by persons who have a narrow conception of the relationship of the university to the public-school system, but if we are willing to abide by the thesis that the university is a part of the public-school system, such action is the logical outcome. Under these conditions, it is, of course, recognized that students who enter the university must be prepared to pursue the courses for which they register. A student who wishes to become an engineer must have taken the necessary preparatory mathematics in high school. He must also have pursued the required courses in English. It is interesting to note that one of our great universities on private foundation has now accepted this point of view, and has widely advertised its willingness to permit an individual to pursue any course in the university for which he is adequately prepared, without reference to the pattern of preparation.

College-Entrance Requirements

Again, a careful investigation carried on at the University of Wyoming, shows that the pattern of subjects usually required for college entrance, has little or no significance in predicting success in university work. There are other factors that are much more important than the specific subjects that have been pursued in high school. While the action of admitting all graduates of accredited high schools to the university was not based on scientific investigation, this subsequent study shows that such action was wholly justifiable. It is only a question of time until most of our higher institutions will adopt a policy which provides for more liberal entrance requirements from the standpoint of requiring specific subjects. The emphasis will be placed on other factors, such as ability, industry, character, interest, and purpose of those who desire to continue their education in a higher institution.

A reciprocal situation should obtain between a state university and the public-school system. Schools prepare students to enter upon university work, and the university gives additional training for these students to again take their places in various public affairs. The university gives instruction to one group so that its members may become engineers in the development of the resources of the state; another group is trained in the law so that its members are competent to give counsel, to advise, and to adjudicate the legal questions that of necessity confront our citizenship. Another group will re-enter the service of the schools as teachers. The university, through the education of young people in their college years, touches all phases of the social life of the state, when these young people take their places and perform the functions of citizens in the various walks of life.

Leadership in Solving School Problems

The university should furnish leadership in the study of educational problems confronting the schools of the state. The assumption is not that university people are more intelligent than are school superintendents, but that they have better facilities for research. They have at their command a well-staffed library and means for gathering necessary statistical data. Again, they are not so greatly engrossed in minor details of administration that must of necessity occupy much of the time and attention of the school superintendent. They have an opportunity to see the state school system in its entirety, rather

than having any particular bias because of local conditions.

During the past summer the University of Wyoming, in co-operation with the State Education Association, the State Department of Education, and the school administrators of the state, studied ten acute problems that are faced by the entire educational system. This seminar brought to the consciousness of all the school people in the state the fact that our school system is a unified whole — anything that vitally affects one area affects all others.

Guidance of Students in University Work

One of the opportunities of a school superintendent is to encourage students of the right caliber to pursue university work. In Wyoming, a co-operative testing program carried on by the University and the schools of the state for several years furnishes one basis for such guidance. At the present time, through the Student Loan Fund, the Student Welfare Foundation, and through F.E.R.A. funds, the university is in a position to assist students who need financial aid. School superintendents should, therefore, be more alert than ever to bring to the attention of the university the economic status of families to which brilliant students belong. In this way it will be possible to grant financial assistance more intelligently. In this state — and it is probably true in other states as well — only half of the graduates of the high schools who rank in the highest decile in ability, continue their education in a higher institution. This probably means that young people capable of making the greatest contribution to the welfare of the state are deprived of the opportunity for higher education. These able people who do not continue their work in higher institutions are more likely to remain in the localities in which they are reared than are those who continue their education in a university. These young people probably, therefore, become leaders in their respective communities, as they are frequently of sound judgment, and their advice and counsel on questions of immediate concern to their localities are of great value. However, the thesis can be maintained that their contributions would be greater had their education been more extensive.

On the other hand, superintendents through counsel and advice may deter incompetent students from entering higher institutions. The superintendent must of necessity be interested in the further education of all his high-school graduates. He should inform himself in regard to the opportunities in specialized institutions where those that he could not recommend to the university, could continue their education in an institution better adapted to their needs. Today this is a pressing problem, as these young people who in previous years could find jobs, now must be taken care of in other ways.

Encouraging Entry into Teaching Professions

There is one group of students in which the superintendent should be particularly interested. This is the group which is planning to enter the teaching profession. His major duty is concerned with the improvement of instruction on the part of his teachers, and for this reason he should emphasize the desirability of encouraging young people of intelligence, good character, right social viewpoint, and satisfactory personality to prepare for the teaching pro-

(Concluded on Page 58)

¹Address given before the administrative section of the Wyoming Education Association, at Sheridan, Wyoming.

THE AMERICAN School Board Journal

EDITORS:



WM. GEO. BRUCE

WM. C. BRUCE

Some Phases of P.W.A. School Projects

THE offer of the Federal Government to finance school-building and equipment projects has met with reasonable acceptance. The school authorities were somewhat slow in coming forward, estimating their needs, and in presenting them to the government authorities for consideration.

But the number of projects presented by school authorities number 2,010 at this time and involve a total construction cost of \$182,444,737. The amount received in grants only is \$16,207,849. The explanation here is that in some instances the school authorities found it more advantageous to sell their bonds in open market than to accept the government's offer upon which a 4-per-cent interest charge is exacted. Then too, the grant of 30 per cent became less attractive when it was discovered that conditions would have to be observed. The rule that financial support is followed by financial control was adhered to.

Some of the school authorities declined both the loan and the grant because acceptance implied adherence to the labor code exacted by the government. This code provides a wage scale, which was higher than that established in certain localities, especially those in smaller communities.

The purpose of the 30-per-cent direct grant was intended to enable the payment of the higher wage scale. But, as already intimated, in certain localities the acceptance of federal aid would in the end involve greater costs. Hence, the refusal to accept the government's offer.

The interest rate stipulated by the Federal Government also became a factor. A number of communities found that their credit in the bond market was excellent and that their obligations could be negotiated at a lower interest rate than the 4-per-cent rate exacted by the government.

In view of the fact that Congress contemplates another appropriation, going into effect some time in July, 1935, it would seem expedient on the part of school authorities to estimate their needs in the way of new school buildings or additions to old buildings, together with the necessary equipment.

The conditions imposed will in all probability be the same as those which obtained in the first appropriation for the administration of the Federal Public Works for building projects to be engaged in by cities and counties of the several states.

A Magnificent Period of Schoolhouse Construction

THE past two decades have seen a remarkable ascendency in the rearing of splendid school structures. The genius, which went into the planning and building of schoolhousing exemplified the highest possibilities in the field of architecture as required and desired in the educational field. Thousands of splendid edifices stand as a monument to that genius which has brought to its service the finest expressions in the art of construction.

But the critic has learned that during a temporary period of unrest he can find a hearing. The magazine writer is ever on the job. He contends that the little red schoolhouse has been superseded by many large schoolhouses, which are all in the red. That is not only a sensational statement which is intended to grip the reader but also one which bears the touch of alarm.

Thus, in a recent magazine article, a writer delivers himself of the following startling paragraph: "New schoolhouses were being built so fast and on so lavish a scale that it was impossible to pay for them out of current taxes, so billions were borrowed for the purpose, and future generations were saddled with the interest and

amortization on the loans. Moreover, they were being built so fast that it was impossible to find children enough to fill them, so they had to be given over mainly to public halls, gymnasiums, locker rooms, dressmaking parlors, kitchens, laboratories, and so on."

If this statement, on the whole, were true, it would constitute a serious indictment of the school authorities who entered upon an era of modern schoolhouse construction. The inference intended is that the educators have succeeded in inducing boards of education to enter upon an era of wholesale extravagance and waste.

The truth if told here will reveal the fact that here and there some extravagance may be charged. But, on the whole, the charge is unwarranted and unfounded. Where the local tax support permitted, town pride and patriotism found expression in ornate structures. The replacement of thousands of one-room schools by consolidated schoolhouses has been in the direction of real economy as well as educational efficiency.

The charge that the country is overbuilt on schoolhousing is simply absurd. Since the era of new schoolhouse construction, which gained its momentum sometime after the world war, the population of the United States has continued to increase. This simply means that the school population has also grown larger, and that a shortage of schoolhousing is already manifest in various centers throughout the country.

The school authorities wisely engaged in the construction of housing when the need for the same was apparent and when the financial situation permitted such enterprise. Praise rather than blame is due those who with characteristic American enterprise and energy provided the nation with school structure, which in point of interior orientation and architectural finish rival all similar efforts engaged in throughout the world.

School Surveys and Their Uses and Abuses

PERIODICALLY there is a wave in the direction of school surveys. Somebody in the school system, or outside of it, believing things are not what they ought to be becomes restive and critical. His mind runs in the direction of a survey that will reveal truths regarding the school system that have hitherto been hidden and concealed. The "Where are we at?" question seeks its answer. The utility and value of a sensibly planned and executed survey of a school system, of certain size and importance, making an inquiry along the lines of physical equipment and professional operation, cannot be questioned. Thousands of such surveys have been made and followed by suggestions and recommendations that have resulted in new departures and policies and a decided tendency in the direction of economy and efficiency.

There are, however, on record many school surveys which were undertaken with a great eclat and enormous expense and which have become dust covered and forgotten documents. While the studies they engaged in were exhaustive and illuminating the conclusions reached by the experts and the recommendations made did not meet with approval and hence remained unheeded.

Here it remains to be said that in many instances the experts ventured upon suggestions and recommendations whose fulfillment bordered upon the impossible. While a survey may deal with the shortcomings in point of housing and equipment, teaching service and curriculum requirements, it must also contemplate these in the light of the true financial status of the school district. Nor may the social and civic status be forgotten.

In estimating what a school system lacks and what it ought to have there may be a small difference of opinion, but when it comes to the question of expediency quite another problem may be encountered. Every community has civic and social limitations as well as sharply defined limits of economic and tax ability. Many things may be listed under the highly desirable, but all things must finally be determined upon the basis of expediency and utility or rather must come within the range of the possible.

Thus, some of the experts who have pictured to themselves the perfect and ideal school system, have patterned their conclusions and recommendations upon standards that have alarmed the hard-headed school official rather than convinced him of their utility and practicability.

Here it is by no means argued that school surveys may not prove serviceable. While much money has been wasted in useless studies, it remains that such studies, properly planned and efficiently carried out, may be turned into profitable use. There are still thousands of school systems that are afflicted with shortcomings and weaknesses which are best revealed through a sensible and illuminating survey.

Exacting Loyalty on the Part of Public-School Teachers

IN THE school life of the nation, loyalty to flag and country, as exemplified by teacher and pupil, has always been an accepted fact. No one would for a moment question the sincerity of those who expressed their allegiance to the American flag. Certainly no one would dream of accusing a public-school teacher of disloyalty.

In New York City, the suspicion that disloyalty had crept into the teaching forces of that city became so acute during the past year that legislative measures were resorted to. A law was passed compelling all teachers employed in the schools to swear allegiance to the flag and country.

The peculiar situation which arose here was that the teachers of New York State were by no means unanimous in their willingness to submit to a law exacting allegiance in a definite avowal. In Chicago, the movement to compel an oath of allegiance on the part of public teachers was defeated. The contention here was that a definite rule or law on the subject implied a reflection upon those who came under its provisions. The loyalty of a teacher it was contended, must be accepted as matter of fact. It ought not to be questioned.

In New York City, it was known that communistic propaganda had entered the ranks of the instructors and that some of these were given to the exploitation of destructive doctrines in matters of government. Some of these were guilty of participating in revolutionary gatherings and voicing dangerous theories and departures.

The school authorities of New York City are not satisfied that the mere exaction of an oath will exclude disloyalty and un-American teachers from the schools. Those under suspicion are to be subjected to an examination as to their social and political views. The board of education has determined to arrive at some plan whereby the teachers engaged in spreading communistic and socialistic propaganda in the classrooms will be effectually eliminated. The inquiry here to be instituted will go beyond a mere avowal made before a board of examiners. It will establish the political leanings of the instructor beyond the element of doubt.

Fortunately, the teaching profession of the nation, as a whole, is free from entertaining false and dangerous doctrines regarding government and the social order. The American teacher is loyal without insuring such loyalty through the exaction of an oath.

Dealing with Critics of the Schools

EVERY community counts among its citizens those who see the failings and shortcomings of the school-administrative factors, and who voice their disapproval, as well as those who approve its labors. Sometimes the faultfinding becomes irritating, more specially when it is undeserved and unwarranted.

An interesting situation arises in communities where the citizenship has become divided into pro-school-board and anti-school-board groups. This is in an eastern city. The school board itself has argued that the critics should become candidates for membership on that body and thus determine the issue so far as public opinion is concerned and finally solve the current pressing problems.

When the critic finds himself intrusted with a definite responsibility, he is usually less vociferous and insistent in his protest. Experience has demonstrated that things may look different from the inside than they do from the outside. In being transferred from one to the other the antagonist becomes a supporter.

It happens that the citizen who has failed to manage his own affairs with any degree of success will usually voice loudly his judgment as to just how public affairs should be conducted. He would have his fellow citizens believe that he knows who is wrong and what is wrong. Such a critic is usually silenced when the mantle of responsibility is thrown upon his shoulders.

The board of education that is circumspect and sure of itself does

not permit itself to be stamped by the street critic or by back-yard gossip. It invites helpful and constructive criticism, and ignores the chronic faultfinder. There are these in every community. The wisdom of a policy or a departure may not always be immediately apparent. The time factor here comes into play, and with it the unreasonable critic usually fades from the picture.

Home Rule in School Government

ONE of the outstanding features of the nation's system of popular education is the decentralized administration of several governmental units. While the state provides certain general laws and regulations governing the schools, the locality is given a wide latitude in the management of its school systems. In brief, home rule is recognized in a definite way. Federal control is unknown.

The impetus which the nation's schools have received in the direction of growth and development has been largely impelled by local initiative, pride, and patriotism. A certain rivalry between town and town has entered into the procedure. If one unit maintains a high school the other must have the same, with the result that in many sections of the country wasteful duplications have been reared.

But that local pride which sought to rival with the neighboring town in the matter of excellence in schoolhousing and an expression of progressive expansion has taken on a more subdued aspect. Self-interest is more definitely asserted. The home-town self-preservation sentiment is intensified at this time because of the disturbed economic situation which afflicts an entire country. It asserts itself in the school field in a positive way. The professional workers cling to their positions with greater tenacity. Outside talent is discredited, nepotism is practiced, the local merchant wants recognition in the matter of school supplies, etc.

While the school administrator cannot ignore the moods and interests that press themselves upon him, he must remain unshaken and steadfast in holding to the sacred task intrusted to him. The interest of the school child must remain his first and main concern. All else must be adjusted to the one great objective. Community interest here centers upon the physical, mental, and normal welfare of the child and its preparation for future life.

Teacher Attacks Upon Boards of Education

IN THE larger cities of the United States it has happened during the past year that civic and social organizations have engaged in discussions on the administration of the schools and have attacked those in charge of such administration. It has also happened that teachers in attendance have joined in a denunciation of the policies carried on by the board of education which employs them.

In New York City, a meeting was held during which several speakers accused the board of education and charged its officials with "wholesale corruption, criminal negligence, and graft and discrimination." A teacher who was present made no protest against these statements but entered into a denunciation of the school system and urged the audience into mass action against the board of education "for the persecution of teachers who fought for the welfare of the teachers."

The school authorities, conscious of the fact that the charges were wholly unfounded and unwarranted, held that it was the duty of the teacher to enter a protest against unjust accusation, and that the failure to do so manifested disloyalty to the school system. Instead she joined not only as an auditor but as a speaker in an attack upon the board of education. The teacher was severely reprimanded.

Happily, incidents of this kind are rare. They note, however, that teachers may be influenced by hostile environment and carried for the moment to an unwise and unethical extreme. On the other hand, incidents of this kind compel the self-respecting board of education to exert that corrective and disciplinary authority which is within its province.

If the youth of the land is to be properly trained for the duties of citizenship they must be instilled with a proper respect for an obedience to the established authorities. Certainly, those intrusted with that training should lead in all that will make for an orderly, law-abiding, progressive citizenship. Those who would exact obedience must also practice obedience, and set the example in recognizing an established order of things designed to insure the welfare of the rising generation.

School Administration in Action

St. Louis Opens Ninth-Grade Centers

George R. Johnson, Director of Tests and Measurements, Public Schools, St. Louis, Missouri

The board of education in St. Louis has succeeded in solving a very difficult problem in school administration by opening 21 ninth-grade centers. The diminishing funds for the support of education during the depression years made it impossible to erect new high-school buildings; but at the same time, the lack of employment for young people kept them in school longer, and the high-school enrollment, therefore, increased during the depression very markedly. The opening of the ninth-grade centers without additional cost has provided the necessary housing to accommodate the enrollment.

In meeting this emergency, the board's first step was to change its junior into senior high schools. The change restored all seventh- and eighth-grade children to the regular elementary schools, whose buildings were constructed originally to accommodate the eight grades. The second step was to open the ninth-grade centers. Since the elementary-school enrollment was not increasing to any considerable extent, but in many districts was actually decreasing, vacant rooms existed in numerous school buildings. By placing the ninth-grade students in these elementary-school buildings where a sufficient number of empty rooms existed to accommodate them, the cost of education has been greatly reduced, and the necessity of constructing new high schools has been postponed. Each ninth-grade center is in reality a small high school, operating within the walls of an elementary-school building, under the local control and supervision of the principal. The teachers, however, are high-school teachers; and their work is organized in a separate unit.

The development of ninth-grade centers is significant for educational as well as financial reasons. The change from an elementary school where children remain under fairly close supervision of one teacher, to the large high school where they come in contact with many teachers, and with different methods is a real problem. The ninth-grade centers in St. Louis, primarily developed to meet a financial emergency, are making this transfer easier. For one more year of life, children attend school nearer their homes; and they remain under the influence of a small group of teachers who can take more cognizance of individual needs than is customary in the large high schools. Ninth-grade cen-

ters actually offer high-school instruction, and give high-school credits, at the same time retaining some of the methods and ways of the elementary school to which the child is accustomed.

The financial economy of the ninth-grade center, its convenience to pupils and patrons due to its nearness to the homes, and its value to children in helping them to transfer successfully from elementary to high-school instruction, are sufficient advantages to justify the belief that this type of organization will continue to be a factor in school administration. Eventually the ninth grade probably will become integrated with the upper grades of the elementary school, and the high schools will begin at the tenth grade.

Of twenty, or more, retrenchment measures adopted by the board of education in St. Louis, on the recommendation of Dr. Henry J. Gerling, Superintendent of Instruction, this shift in the form of organization is probably the most significant. It has taken away no important service, or educational opportunity, and it has brought the advantages already enumerated. The school income in St. Louis has dropped to little more than two thirds of the amount which would have been available on the 1930 basis; but none of the vital services have been discontinued, and the salary schedule has been retained with only a temporary ten per cent reduction during the past two years. One

of the largest factors in countering the effects of reduced income was the more effective use of the existing school plant through the establishment of ninth-grade centers.

EDUCATION PASSES THE BOTTOM

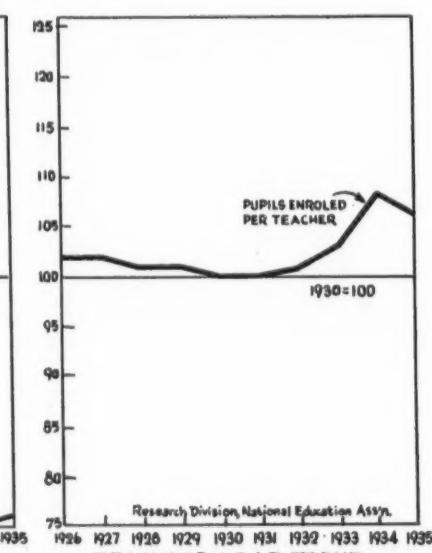
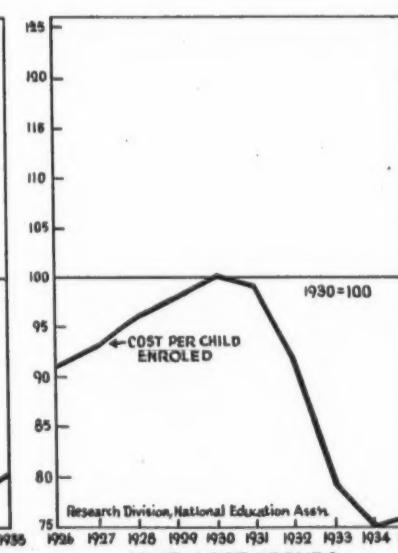
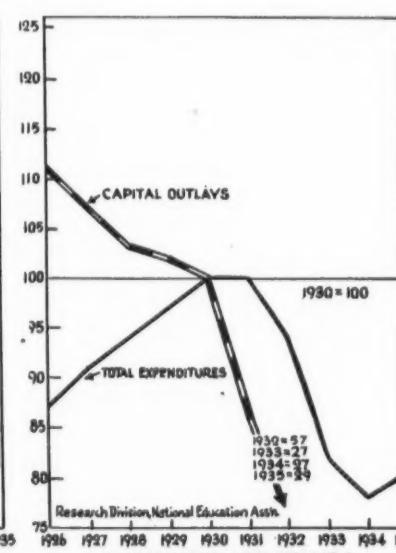
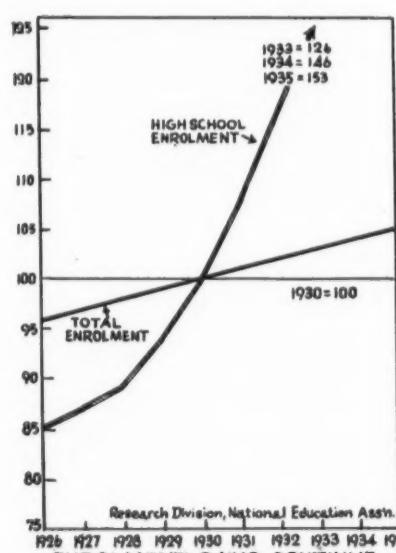
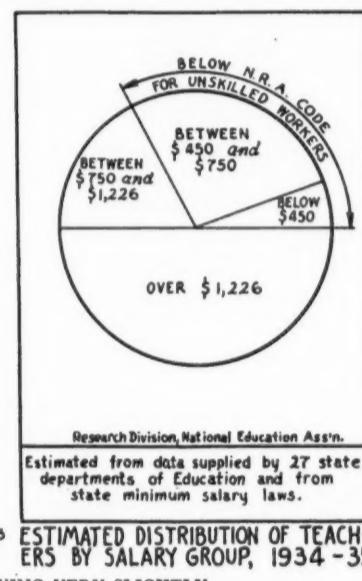
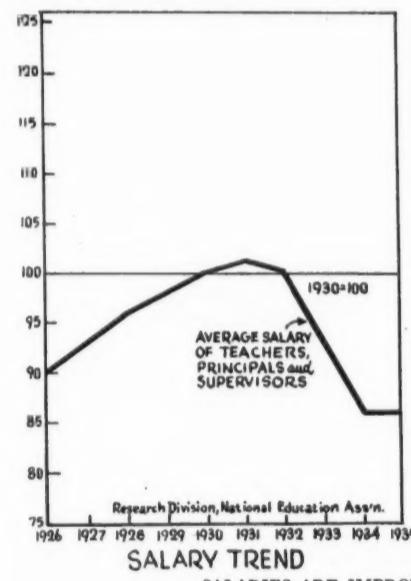
During the year 1934 education reached the lowest point in expenditures and costs. According to a study of the Research Department of the National Education Association, the downward trend has been checked and a slight improvement is registered in the estimates for the school year ending in June, 1935.

The preliminary indications uncovered by the study do not suggest a definite substantial recovery in all states. In fact, in the drouth areas and in certain southern states, the school outlook is still unfavorable, and throughout the country the anticipated gains are not great. It is safe to say, however, that the decline in school revenues for the nation as a whole, has been checked. The accompanying graphs will make the situation clear.

The salary trend, if it has not been definitely improved, is not getting any worse, and there are plenty of signs of a distinct improvement in the larger and medium-sized cities. In the rural districts, conditions have not yet changed. The teaching load, however, has passed the peak of its increase and is again definitely downward.

In strong contrast to the expenditure and salary trends, the total enrollment and the high-school enrollments continue to gain rapidly. The elementary enrollments are declining due to the reduced birth rate and the encroachments of the junior high school.

Another heartening sign of the better day to come is found in the restoration of educational services which had been reduced or eliminated. This takes into account especially those newer subjects and activities which represent the modern trend in education.



EDUCATIONAL CONDITIONS IN THE UNITED STATES AT LARGE AS VIEWED BY THE RESEARCH DIVISION OF THE NATIONAL EDUCATION ASSOCIATION

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New York State School Boards Hold Constructive Convention

The growing influence and the constructive service of the New York State School Boards Association was evidenced at the recent fifteenth annual convention, held at Syracuse, October 29 and 30. Under the active leadership of Mr. Guy W. Cheney, president of the Association, of Mr. W. A. Clifford, executive secretary, and of the executive committee, the Association held a two-day convention which brought into strong relief the eminent leadership of the school boards of the state not only for improved educational service but also for constructive legislation.

At the morning session on October 29, the Association heard a forward-looking address on "Improved Methods of Distributing State Aid in New York State." Dr. Paul Mort, of Teachers College, was the speaker. During the balance of the morning session the Association divided into three groups: (a) city school districts; (b) union free school districts; and (c) central and common-school districts. The city-districts group listened to addresses on "Constructive School Economy," by Supt. Claude Hardy, of White Plains, and on "Physical Education" by Supt. A. J. Stoddard, of Providence, R. I.

The union-school-district group listened to a discussion of "A Minimum Program of Education" by Dr. J. Cayce Morrison. A paper, "The Relation of the Board of Education to the Administrative and Teaching Staffs," was read by Dr. Karl C. Leebrick, of Syracuse University. In the common-school-district session, typical problems and accomplishments of rural schools were taken up.

After a luncheon, presided over by Mr. Cheney, Dr. N. L. Engelhardt presented a discussion of "Needed Changes in the Business Management of Boards of Education to Meet Present-Day Conditions." In brief, Dr. Engelhardt summarized the proper functions of a board of education as follows:

1. Eliminate standing committees. A city looks to the board of nine members to manage its schools. With standing committees the board breaks itself up into several smaller boards, loses some of that unity of understanding on the part of the whole body which is so essential, scatters its energies, and wastes its time.

2. Systematize its business and give to its executive staff full responsibility for executive detail, and devote itself only to oversight and direction of all that is done.

3. Make the superintendent the executive officer, give him full powers and responsibilities, and hold him strictly accountable for the successful conduct of all departments of the system.

4. Appoint the superintendent for a three-year term.

5. With the superintendent's aid, define the functions of every member of the educational service.

The board should say to the superintendent: "Everything to be done here is for one end—the education of the child. Everything you recommend we are going to ask you to justify in one way only—by showing that it is necessary to the running of a good school system. You are the expert whom we have put in charge of it, and we are going to see that you do your work, and you are to keep us fully informed and at all times convinced that the work is being done as we wish it done—in as complete and effective manner as funds permit. If you recommend new things, you must convince us that they are necessary. You will be held strictly accountable for every expenditure. We shall watch the results which you get with the utmost care."

6. The superintendent should plan a policy of development, and submit the same in great detail; the same to include a report on the school system as it is, with recommendations as to what it should be. The board should study the report with great care, and decide either for, or against, the policy laid down. This procedure should be repeated at frequent intervals.

7. The superintendent, as an expert in education, should convince the board by frequent reports thereon, that the schools are continually progressing in two respects particularly—in the efficiency of teachers and in the character of the training given to the children. The superintendent's business is to secure this progress; the board's duty is to see that he secures it and to give

him ample powers with which to produce it.

8. If the board makes its executive officers take full responsibility for the proper working of the school system, one regular meeting a month of the board will be ample to transact all its business.

9. Adjourned and special meetings may be called when needed.

10. Special committees will be appointed to investigate and report in writing to the board on matters that require very special attention.

Members of a board of education are directors of a large corporation, and should apply the principles of good corporation management to educational affairs. Their executive officers should have authority and be held accountable for the work.

A board should supply funds, supervise expenditures, and determine the policy and future extension of the school system.

Its duty is to see that the schools are properly managed, and not to manage them itself.

It is not appointed to build buildings; but to see that they are built.

It is not appointed to supervise teachers; but to see that they are supervised.

In short, it is appointed, not to do the work itself, but to get it done.

As running a school system is an expert business, directed to one end—the education of children—it should be managed by an expert manager, and that manager must be an educator.

Discussions of insurance problems and of the reports of the directors and committees concluded the afternoon session.

At the annual dinner, Mr. Meyer Bloomfield, of New York City, discussed "Community and School Relationships in the Leisure Age," and Supt. A. J. Stoddard, of Providence, R. I., spoke on "The Function of the School for Our Democracy."

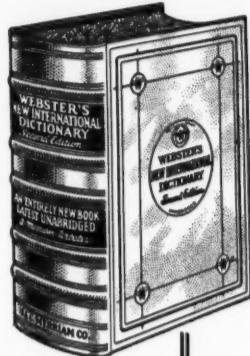
At the morning session on October 30, papers on "The National Housing Act," "The Health Supervision of City Schools," "A Program of Education for New York State," and "Pupil Behavior" were heard.

The Resolutions

In a series of fourteen resolutions, the Association put itself on record to advocate better school conditions and show its appreciation of its officers, directors, and local hosts. The following significant resolutions were adopted:

(Concluded on Page 48)

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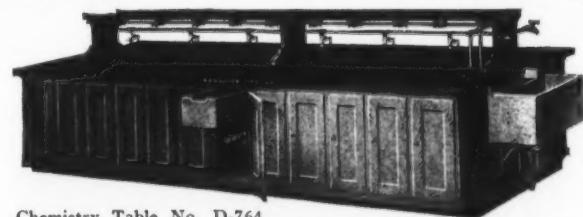
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STANDARD MAKES EVERY MINUTE COUNT

(Concluded from Page 46)

The Association urges the governor and the legislature to amend the education law, making compulsory the elimination of one-room schools with an average daily attendance of five pupils or less, except where special circumstances require otherwise, and permitting the elimination of schools having an average daily attendance of ten pupils or less by the Commissioner of Education.

The Association places itself on record as opposing any extension of tenure and recommends to the board of directors, continued effort to secure a modification of the tenure law as it now affects state schools.

In a further resolution, the Association recommends to the governor and the legislature that suitable legislation be passed providing for the recodification of the education law.

The Association requests by resolution that the state department of education and/or the state insurance department to make a study of school-transportation insurance costs, with a view of securing lower school-bus insurance rates based on state-wide experience for rating school busses only.

The resolutions further direct the incoming president to appoint a committee to make a complete and thorough study of the insurance and bonding problems confronting the school districts with the aim of presenting a resolution to assist boards in carrying out their insurance and bonding problems.

The Association favors the payment of state aid in small amounts extending throughout the school year so as to obviate the difficulty of securing treasurer's bonds for the security of large amounts of money now necessarily deposited in small banks, and to eliminate the forced borrowing of large sums of money in short-term loans, while awaiting the receipt of state aid that is now received in two payments. The president of the Association is directed to make such efforts as might be needed to secure such frequent payments of state aid.

A final resolution provides for admitting the New York City board of education as a member in the organization.

The report of Secretary Clifford indicated that 515 boards of education out of 800 high-school boards in the state are enrolled in the Association. The registration records show that 696 school trustees and 52 district superintendents were present and that the total attendance was 785.

The following officers were elected:

President, H. L. Fuess, Waterville.

Vice-presidents—City Section, C. Mossman, McLean, Binghamton; Village Section, E. E. Day, Bronxville; Central Section, Enos Lee, Yorktown Heights; and Rural Section, J. L. Wilder, Troy.

Corresponding secretary, William F. Seber, Troy. The executive secretary is Mr. W. A. Clifford.



MR. HAROLD L. FUSS
Waterville, New York.
President, New York State School Board Association

School Law

School boards in conducting schools have wide discretion with which courts will not interfere in the absence of abuse (Ohio general code, §§ 7644, 7690).—*Board of Education of Cleveland Heights v. State ex rel. Goldman*, 191 Northeastern reporter 914, 47 Ohio App. 417.

Schools and School Districts

The driver of a school bus who, as a private individual, undertakes for hire to safely transport a child to the schoolgrounds, is liable for the negligent care of the pupil.—*Tipton v. Willey*, 191 Northeastern reporter 804, 47 Ohio App. 236.

A complaint charging that the school-bus driver who, as a private individual, undertook for hire to safely transport a child, directed a 6-year-old boy to alight and afforded him opportunity to step in front of approaching traffic by crossing the street without exercising the ordinary care to ascertain whether the way was safe, and to advise the child accordingly, stated the cause of action for negligence.—*Tipton v. Willey*, 191 Northeastern reporter 804, 47 Ohio App. 236.

If a school-bus driver's negligence where a child was struck by a third person's automobile was one of two proximate causes of injuries, the driver was liable.—*Tipton v. Willey*, 191 Northeastern reporter 804, 47 Ohio App. 236.

School-District Taxation

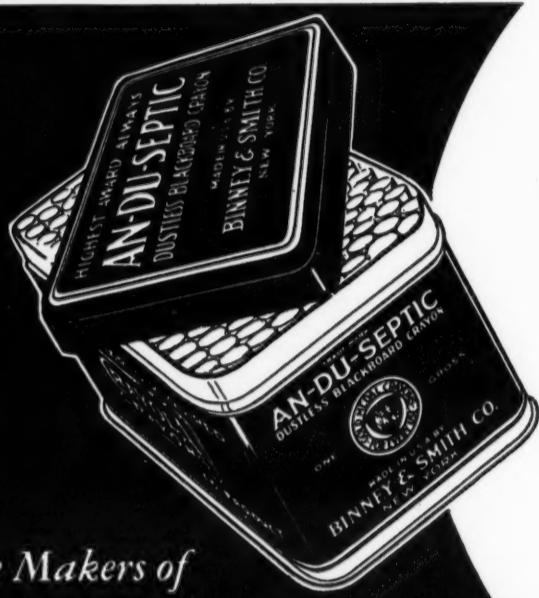
School indebtedness once lawfully incurred, if not paid when due, continues as a charge payable at a later date out of tax revenues for school purposes, even though the payment tends to diminish the revenue that might otherwise be left for current school expenditures.—*State Bank of Bowling Green v. Board of Public Instruction for Hardee County*, 156 Southern reporter 319, Fla.

Teachers

A provision in a female teacher's contract for the termination thereof in the event of a teacher's marriage was held valid (Oreg. code of 1930, §§ 35-11-5, 35-1108).—*Hendryx v. School Dist. No. 4, Lane County*, 35 Pacific reporter (2d) 235, Oreg.

A teacher is bound to take notice of all the rules of a school board which may affect the power to dismiss a teacher.—*Hendryx v. School Dist. No. 4, Lane County*, 35 Pacific reporter (2d) 235, Oreg.

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Book News

Practical School Economics

By Henry H. Linn. Cloth bound, 461 pages. Published by the Bureau of Publications, Teachers College, Columbia University, New York City.

No study could be more acceptable to the school administrators of the country at this time than one which dealt comprehensively and intelligently with the subject of school finance. The book in hand, therefore, is both timely and welcome.

This thought is well expressed by the editors, George D. Strayer and N. L. Engelhardt, who contend that "the public-school administration is at all times confronted with the problem of securing the most efficient human service and the most usable and practical equipment and other material goods for the money expended."

Then the editors add that "it is probably fair to state that the school systems of this country have practiced economy in the expenditure of public funds to a far greater degree than all other publicly supported governmental units!"

Dr. Linn aims in this book to present his interpretation of economy as applied to the operation and maintenance of the public schools in the United States. That economy necessarily implies efficiency, in that it contemplates the expenditure of the dollar and at the same time secures therefrom the highest possible measure of service.

In demonstrating the reasons for increased school costs, the author admits the enlarged service demanded by the public. This includes an increased enrollment, expansion of educational program, lengthened school term, better-trained teachers, and an adequate compensation, larger and better school buildings, and finally increased expenditures for debt service. Before entering upon the subject of sound school administration, the author points out the basic reasons for inefficiency of the administration of school finances. He notes some of the waste entailed through decentralized control, the political aspect of control, the weakness of legislative remedy, and finally the irresponsibilities of public officials in the matter of public expenditures.

The pivotal point in Dr. Linn's treatment of the sub-

ject is reached when he defines true versus false economies in school administration. To some people economy here means low wages, the cheapest type of supplies for instructional purposes, housing in poor and inadequate buildings, abolishing playground activities or health service, or shortening the school term.

"Another group," says the author, "think of economy as the wise spending of money to secure the greatest worth-while returns for the money expended. The first cost to them is not the chief consideration. They choose to employ a physician to correct their ills rather than to trust to patent medicines. They favor the employ of well-qualified teachers, the use of supplies that serve their purposes best, the construction of modern buildings, and well-rounded educational offerings. To them economy means wise spending."

A number of examples of true versus false economies are then presented. Many items and articles which are employed in and about a school plant are enumerated, demonstrating the need of common-sense housekeeping in point of operation and maintenance.

The subject of sound business procedures as a basis to economy and efficiency are exhaustively dealt with. Here the questions of financial accounting, budgetary procedures, school inventories, safeguarding school deposits, publicity as a factor in public relations, efficient office practices, etc., are well discussed.

Adequate attention is given to the purchase, storage, and distribution of school supplies. The author discusses the merits of fixed authority in the managing of a school-supply department. How to buy, how to test articles bought, the economies effected in buying in proper quantities, the weakness of competitive bidding, etc.

The real value of the volume may be found in the economies effected through the general control of the several factors which constitute the school system as a whole. Here the author enters into the control of income, of the instructional service, plant operation, plant maintenance, fixed charges, capital outlay, etc. No factor or consideration pertinent to the subject is overlooked.

The chapter on school-plant maintenance is exceptionally well done. It proceeds from the standpoint of safety, service, and economy. The organization and administration of the maintenance department, the reduction of waste and loss of time, proper supervision, all-year repair programs, salvaging materials and equipment, and the various factors entering here are sensibly discussed.

Another chapter, which deserves special mention, is one which deals with the economies involved in capital outlay. The problem of site selection, the choosing of architectural service, the expediency of a school-building department, the awarding of contracts, supervision of construction, the waste likely to arise in choosing utilitarian mechanical devices, etc., are brought to the surface.

A comprehensive bibliography follows each chapter. Here, it may not be out of place to note that 145 articles, which appeared in THE AMERICAN SCHOOL BOARD JOURNAL, are noted.

How We Have Conquered Distance

By Maybell G. Bush and John F. Waddell. Cloth, 290 pages. Price, 96 cents. The Macmillan Company, New York, N. Y.

A supplementary reader, in the field of social science, for pupils of the elementary grades. The unit system is employed and the matter is well organized. The vocabulary, with few exceptions, is readily within the ability of pupils. The illustrations are well chosen, significant, and full of interest to young folks.

Our Continental Neighbors

By Albert Perry Brigham and Charles T. McFarlane. Part One. Cloth, 208 pages, illustrated. American Book Company, New York City.

This is a special edition arranged to comply with the new course of study of the State of Pennsylvania. The order of presentation of the material has been rearranged, placing all the material on Europe in Part One, but leaving the page numbers for this section stand as in the original edition. There are also a few additions to the text. Otherwise this edition retains the text and other features of the original reviewed in this Journal early in the year. Besides the excellent "human" way of the text itself, there are the abundant illustrations which successfully create atmosphere, and the many accurate and clear physical and political maps.

Songs of Wild Birds

By Albert R. Brand. Cloth, 91 pages, illustrated, two phonograph records included. \$2. Thomas Nelson and Sons, New York City.

A familiarity with bird notes has been acquired usually by long attentive study. Professor Brand, with the co-operation of a number of mechanical experts, has adapted the sound-on-film technique to the making of phonographic records of bird notes in their natural environment. The book explains how it is done

(Concluded on Page 52)

RECREATIONAL PLANNING IN RELATION TO SCHOOL- PLANT PLANNING

(Concluded from Page 32)

sound method of determining space requirements.

Since doubling the child population does not mean that twice as large a playground is needed, it may be asked if it is not preferable to have fewer large playgrounds at greater intervals than to have more playgrounds the standard size. Probably the cost would be less. This tendency has been followed in the case of school-building programs. It should be kept in mind, however, that the function of the playground is to serve the needs of the children within an effective drawing radius. To extend this radius to the point where it deprives children of the regular use of the playground is to defeat its major purpose. Studies of playground attendance show that relatively few children will walk more than half a mile to reach a playground, and that the majority of children attending, live within a quarter-mile radius. Therefore, if a city is to be adequately provided with playground service, the areas should be established so that no child need walk more than a half mile to reach a playground. In the case of congested sections where the child population is greater or where there are serious traffic hazards, the radius should be reduced to a quarter mile. In such neighborhoods, it is probable that the elementary schools would also be placed at close intervals.

The Athletic Field and Neighborhood Playfield

Just as children's playgrounds have been developed in connection with elementary-school sites, so fields for athletics and various other forms of recreation have been developed on junior- and senior-high-school sites. A number of the problems which were previously discussed also have a bearing on the acquisition, control, development, and use of outdoor high-school areas, and in general the same principles may be applied to them.

The athletic field is a highly specialized type of area, with facilities for a limited number of major sports such as football, baseball, track and field events. It is usually fenced, provided with large seating facilities, is designed for athletic contests where many spectators are to be served, and provides a large parking area. Until recent years the athletic field was the accepted type of high-school recreation area. Its use was largely restricted to a few school teams in a few sports. The large investment in these plants yielded relatively small returns in service. The athletic field still has a place in the recreation system but, except for the larger cities, it is doubtful whether more than one area of this type is needed. Perhaps the most important factor in determining its location should be accessibility by bus, trolley, and automobile. There is an advantage in having the athletic field adjoining the senior high school. Five acres is the absolute minimum required for an athletic field and from ten to twenty acres are preferable.

More important than the highly developed athletic field is the area commonly known as the neighborhood playfield. This type of area provides not only for highly organized games and sports but also for a variety of activities appealing to persons of varying ages and abilities and including courts for tennis, handball, horseshoes, roque, bowling on the green, paddle tennis, field hockey, playground baseball, volley ball, archery, and a variety of others. Most of these activities are features of the high-school physical-education and play program. With the increasing emphasis upon athletics for all and upon activities which can be engaged in for many years after people leave

school, areas of this type are replacing the school athletic field. The playfield serves a large number of school children and also provides the features which appeal to community groups. Duplication of these areas is not only unwise but will be impossible in view of the resulting costs. Therefore, it is reasonable to believe that the common needs of both school and community groups can, and should be, met on the same area.

Playfields for High Schools

There is rather general agreement that a playfield can be located to best advantage at or adjoining the high-school plant, in order that it may most effectively serve a dual use. Unless the school authorities recognize that these areas are to be equally available for school and community use, there is good reason to believe that title to them should rest with the city. In any case, wise city planning would seem to indicate the advantage of locating this important type of recreation area at or near the high-school site.

Only a few suggestions can be offered here for the development of the playfield. It should provide a special section for women and girls; facilities appealing to a wide range of ages and interests should be included, from baseball for the young men to roque and horseshoes for the old ones; features most frequently used in the school program should be located near the school building; picnic facilities or a swimming pool may be appropriate at some playfields. Frequently a section may be developed as the children's playground of the neighborhood. The entire area should be landscaped, and if space permits gardens and an arboretum may be established. The various sections should be separated by suitable plantings, paths, or fences. Because of the intensive use which certain features such as tennis courts receive over a long season, special surfaces such as concrete or asphalt may be needed. Likewise, use of the fields and courts by young people and adults makes it essential that lighting systems be installed in order to permit evening play. Fifteen to twenty acres are needed in order to make possible the various features essential to the playfield.

In view of the fact that recreation authorities have estimated that playgrounds and playfields should comprise from 25 to 40 per cent of a city's total permanent open area, it is evident that a satisfactory solution of the problem of securing adequate, well-located playgrounds and playfields is of paramount importance. If school, recreation, and city planning authorities can work out a successful plan for acquiring and developing these two types of areas so as to effectively serve school and community needs, a major problem in recreation planning will have been solved.

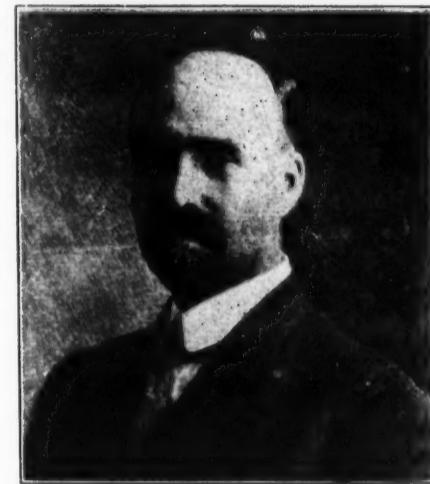
Another question to be answered is, "Who should be responsible for designing the recreation areas?" It is obvious that the agency controlling the area has the final responsibility for its design. If it is on school property, there is little question that final control should rest with the superintendent, if on park property, the park executive should be responsible for the plan. In any case, it is highly important that the advice of recreation experts be secured in designing the area. Since the plant is to be used by the physical-education staff, this department of the schools should have an opportunity to offer suggestions, whether the area is on school or city property. The landscape architect has a valuable contribution to offer but his advice with reference to the choice and arrangement of the recreation facilities should be subordinated to that of specialists in this particular field. Co-operative arrangements have been worked out between school and city authorities for the design and use of school areas in several cities. Regardless of the local respon-

sibility for operating the plant, the most satisfactory results are likely to be attained when school and recreation authorities co-operate with the landscape architect in designing the area.

(To be concluded in January)

PASSING OF DR. BROWN OF NEW YORK UNIVERSITY

Dr. Elmer Ellsworth Brown, for more than twenty years chancellor of New York University, died in New York City, on November 3, after a brief illness of cardiac pneumonia.



DR. ELMER ELLSWORTH BROWN
Died, November 3, 1934.

Dr. Brown was well known because of his work as a former United States Commissioner of Education and as president of the National Education Association.

Dr. Brown, who was born in Kiantone, N. Y., August 28, 1861, was a graduate of the Illinois State Normal University in the class of 1881, and attended the University of Michigan, where he was graduated in 1889. He studied in the University of Halle-Wittenberg, Prussia, where he received the degree of Ph.D., and completed special work in Columbia, Wesleyan, and George Washington and Rutgers universities.

Dr. Brown began his professional work as a high-school principal in Jackson, Mich. After a year he was called to the University of Michigan as an assistant professor. He remained there until 1892, when he was appointed associate professor of education in the University of California. In 1893, he was raised to a full professorship and remained until 1906 when he was appointed by President Theodore Roosevelt as United States Commissioner of Education to succeed William T. Harris. He remained in that position until 1911, when he resigned to become chancellor of New York University. As chancellor, he strove to weld the university to its environment, to show common ends in the needs of the city and in the ideals of higher learning. It was his insistence on higher schooling as a means to culture which shaped policies that were to be the guide of the university in future years.

Dr. Brown was the author of a number of books on educational subjects and prepared a number of reports, articles, and addresses on timely topics.

DEATH OF DR. FORBES

Dr. George M. Forbes, professor emeritus of the University of Rochester and president of the Rochester board of education from 1906 to 1912, died at his home on October 30, after a long illness. Dr. Forbes was in his eighty-second year.

Dr. Forbes was graduated from the University of Rochester in 1878 and took his master of arts degree in 1881. In 1890 he became head of the departments of education and philosophy, which he served until ill health compelled his retirement. He was commissioner of schools from 1900 to 1906, when he became president of the board.

NEW ACTIVITIES AT NEEDLES, CALIFORNIA

The school year 1934-35 opened in Needles, Calif., with the inauguration of a number of new activities and improvements to the schools. A school-improvement program was completed during the summer months, and the playgrounds were resurfaced. A study-hall library has been opened as an adjunct of the high-school group, and a first-aid room has also been added. A branch high school and seven elementary classrooms have been added to the school system to meet an emergency situation in the southern boundary of the high-school and elementary-school districts.

An effort was made during the year to improve the reading and study habits of the students through a consistent and thorough program of reading in each subject in the high school.

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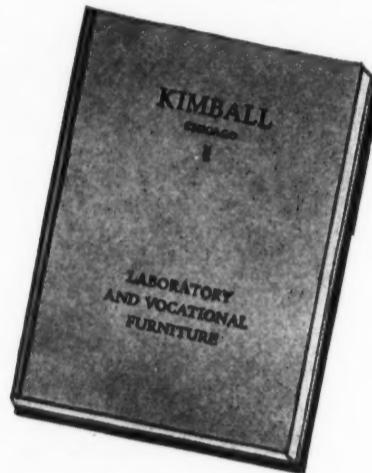
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(Concluded from Page 49)

and describes the note of each bird referring to the record on which it has been reproduced. Teachers may throw pictures of the birds on a screen, while the records are being played.

The Arithmetic of Business

By F. J. MacMackin, J. A. Marsh, and C. E. Baten. Cloth, 477 pages. Price, \$1.48. Ginn and Company, Boston, Mass.

The authors have built a textbook which holds to the fundamental operations in all business activities. Thus, they observe the thorough treatment of essentials as these may arise in commercial life and with which the student must eventually concern himself.

The first three chapters concern themselves with whole numbers and decimals, common fractions, and measures and measurements. Then follow chapters on percentage, discounts, profits and losses, depreciation, and business commissions. The student is also initiated into such factors as interest charges, insurance, promissory notes, exchange, installment buying, graphs, taxes, and customs duties.

In every chapter an abundance of practice exercises are provided on two levels of difficulty. Each unit is followed by an achievement test and by directions for review and remedial study and two supplementary series of problems for reteaching.

Business Mathematics: Principles and Practice

By R. Robert Rosenberg. Cloth, 502 pages. Price, \$1.40. The Gregg Publishing Company, New York City, Chicago.

The major aims of this book include speed and accuracy in business calculations, the development of ability in mental computations, practical skill in short cuts, an understanding of business subjects, and habits of systematic procedure.

Thus, the text gives attention to oral drills in the several arithmetical processes of computation. The student is introduced into the intricacies of payrolls, various kinds of discounts, percentages, brokerage, interest charges, taxes, insurance, etc. The text also deals with the subject of inventory, depreciation, and the like. The several chapters enter in a most illuminating way into problems and their solution. Most phases of business practice are covered with instructive lessons.

PUBLICATIONS

Education in the Drought States

Paper, 57 pages. Prepared by John K. Norton, for the Joint Commission on the Emergency in Education. Issued by the National Education Association, 1201 Sixteenth St. N. W., Washington, D. C.

A report concerning the outlook for education in the drought area. The report embraces a general survey of the situation, the economic aspect, the school revenues and expenditures, the educational program, the federal emergency aid, and closes with a summary of the problems confronting this area.

Supervised Correspondence Study

Price 25 cents. Published by International Textbook Company, Scranton, Pa.

A report on a conference to formulate policies regarding the use of supervised correspondence study as a practical means of enriching the curriculum of American secondary schools. It contains a valuable bibliography, and suggests a plan for administering courses and standardizing cost accounting of the same.

European Policies of Financing Public Educational Institutions
III, Austria. By Fletcher H. Swift. Paper, 343 pages. University of California Press, Berkeley, Calif.

The present pamphlet describes Austria's policies in the financing of educational institutions and shows how through a revolutionary process, it was possible to retain the entire teaching staff and to inaugurate a reformed and progressive school program. Like France and other European countries, Austria has endeavored to insure the personal welfare and professional stability of teachers as well as all other public employees. The booklet takes up the method of financing elementary schools, the system used in financing secondary education, and the financing of higher instruction.

Experiments in Reading

By William A. McCall, Luella B. Cook, and George W. Norvell. Books I, II, III. Paper, 128 to 150 pages. 40 cents each. Harcourt, Brace and Company, New York City.

These three books for the junior-high-school grades are, as the publishers say, an entirely new contribution to the teaching of reading. They test the pupil's ability and, at the same time, offer an opportunity for systematic practice in acquiring skill. The mechanics of the exercises have been skillfully worked out so that progress is easy and practically certain. They are designed to accompany the literature series *Hidden Treasures* by the same authors, although they would be an effective device with a course using any other selections.

Robert's School

By Stella Yowell. Cloth, 128 pages, illustrated. 60 cents. Wheeler Publishing Company, Chicago, Ill.

To solve the long-standing problem of the difficulty second-grade pupils commonly find in their reading at the beginning of the year, Miss Yowell, a professor of education and English, has prepared this book. She calls it a pre-second reader. The vocabulary is on the first-grade level, but the stories of school activities, which make up the content, are placed in the second year.

20th Century Workbook in Civics

By Gale Smith. Paper, 133 pages. The Benton Review Shop, Fowler, Ind.

This is an excellent guide for a comprehensive course in civics for the senior high school. It is intended as the unifying basis of the course in outline, with several good modern textbooks available for reading assignments and some purely reference and statistical works for up-to-date information.

The course is divided into 17 large units (e.g., I. The National Government, VIII. Political Parties and Elections). Each unit constitutes an assignment and contains (1) The Statement of Objectives; (2) Directed-Study Outline; (3) Study Questions; (4) Discussion Questions; (5) References.

A pad of tests on the various units has been prepared, and a Teacher's Manual supplies the teacher with a handy set of answers to the blank-filling exercises and questions for the student.

The use of this workbook guide should be a powerful stimulus to interest in the civics class.

Financial Data for Ohio Cities and Villages, for September, 1934

Compiled by T. C. Holy. Issued by the Ohio State University, Columbus, Ohio.

A tabulation of financial data and bond-issue information, collected from Ohio counties, cities, and exempted villages. Part A contains the general financial items such as tax duplicate, wealth, school-tax rates, total tax rates, and school bonded debt. Part B gives the information on school bonds and special levies, bonded indebtedness for other than schools, and bonds which are being refunded. According to the report, two districts in 1934 submitted bond issues, and the total amount of the bond issues was \$87,000. A total of 32 districts refunded bonds and the amount of bonds refunded reached \$2,523,278. The total number of districts submitting special levies was 57, and the average millage of special levies was 2.91. The number of cities reporting to the questionnaire was 106.

Report of the Committee on Civil Service for Teachers, July, 1934

Prepared and issued by the Research Division, National Education Association, Washington, D. C.

The report discusses civil service and tenure and shows the procedure in the various states in adopting tenure and plans for employment and dismissal of teachers. The study indicates that in Indiana, the benefits of tenure have outweighed the detriments.

A Program of Eye Health in a School System

By Mary Emma Smith, R.N. Paper, 14 pages. Price, 10 cents. Publication 143, June, 1934, of the National Society for the Prevention of Blindness, Inc., New York City.

A tentative program of eye health for a school system. It outlines the general and specific objectives, and gives suggestions for essential activities, and procedure in organizing and carrying out a sight-conservation program. A checking sheet is appended for use in checking the essentials of schoolroom equipment.

Provisions for Individual Differences Marking and Promotion in High Schools

Bulletin No. 17, 1932 of the National Survey of Secondary Education. Price, 60 cents. Superintendent of Documents, Government Printing Office, Washington, D. C.

The U. S. Office of Education, in its findings, following the survey of secondary education, found that only a small number of the 24,000 secondary schools of the country actually realize the whole aim of dealing with individual differences of pupils in their abilities, interests, aims, and needs.

The survey reported progress in the endeavor of high schools of the country to arrange courses that deal with individual differences of pupils. There has been a rapid increase in high-school enrollment which has strained the ordinary resources of school systems on the one hand, while an economic stringency on the other has not encouraged innovation. The large influx of children in recent years has ascended to considerable extent from a hitherto lower economic level, but this ascent has raised problems which the former high schools did not have to face.



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School Board News

NEW ACTIVITIES IN THE PUBLIC SCHOOLS OF CHARLESTON, ILLINOIS

The public schools of Charleston, Ill., opened for the new school year with a number of new activities in operation for the first time. Under the direction of Supt. U. B. Jeffries changes have been made in organization and administration and, in some cases, a new setup has been introduced.

With the opening of the school year 1934-35, the schools have entered upon the second year under the annual promotion plan, which has proved most successful in operation. The new plan was put into initial operation during the year 1932-33 in order to eliminate certain disadvantages which have crept in as a result of the semiannual promotion plan. Under the semiannual plan, the schools annually faced the problem of large classes in the first grade due to the fact that beginning pupils were held over in January, and were required to wait until the regular class started in September. This resulted in each teacher having a large section of pupils who had started in September. Each teacher was compelled to direct two classes, one much larger than the other, in the same room.

Under the new annual plan of promotion, special attention is given to the fundamentals of the various subjects for pupils who are capable of being given an extra half-year promotion. Those unable to do this work are held back a half year. Lists of pupils given double promotions have been kept and passed on to the teachers having those pupils the next year. During the school year 1934-35, teachers have only one section in place of two in their charge. Allowance is made for modification of the work as desired, and considerable individual attention is permitted. The change has been automatically made in the elementary grades, but is being effected gradually in the high school. It is expected that the plan will be in full operation in the high school within two years.

Under the new plan, it has been possible to employ one less teacher in the seventh and eighth grades and one less in the first six grades. Considerable economy in operation is possible due to the fact that the same number of teachers can be employed even where the enrollment has increased.

During the year, teachers' salaries are being increased 5 per cent over the previous year, and the regular salary increments have been resumed. The salaries at the present time are only 5½ per cent below the level of two years ago.

The school district has passed through the depression very well despite the fact that it has been compelled to economize for several years. Its finances have been well managed and all obligations have been met promptly. Teachers have been paid promptly and in cash. The bonded indebtedness of the district has been reduced from \$97,000 to \$52,000, and the tax levy has been cut from \$104,000 to \$65,000. All of the economy features were inaugurated without a curtailment of the educational program. In fact, one new activity was inaugurated. Music, athletics, dramatics, and other extracurricular activities have been continued without a curtailment. A complete program of athletics and physical education is being offered during the present school year.

A full-time school nurse was regularly employed during the past year, and a practical program of health education and prevention of contagious disease has been put in operation for this year.

ADOPT NEW POLICY CONCERNING NON-SCHOOL ACTIVITIES

The administrative department of the public schools of Lewiston, Idaho, has inaugurated a new policy for scheduling pupil activities out of regular school hours.

Under the new policy, school programs, meetings, and practices for school affairs are scheduled for after-school hours and Friday nights and Saturdays.

Every effort is made to avoid scheduling school activities on Tuesday and Thursday nights in order that pupils may have those evenings free for nonschool activities. Teachers must avoid keeping children after school at times when they may be needed by other organizations preparing programs for special occasions of wide religious or community significance.

Meetings of pupil-groups out of regular school hours are arranged by the teacher in charge through the building principal.

Coaches and directors of special activities are permitted to make an absolute requirement that members of such groups shall be prompt and regular in attendance at practices and rehearsals. Participation in extracurricular activities must be entirely voluntary on the part of pupils.

Substitute teachers may be used for the relief of the teaching principal in supervision or in an emer-

gency, and for the relief of teachers for special projects of school and community value, such as visiting and observing other teachers at work, attendance at educational conferences, student trips, and other approved community or professional service.

Clerical help is used to relieve principals and overloaded teachers, in the performance of routine work, such as duplicating lesson plans, making out reports, and handling supplies.

STAMFORD PUBLIC SCHOOLS MAKE PROGRESS

During the year 1933-34, the public schools of Stamford, Conn., effected a reorganization of the junior high schools, providing for the housing of the seventh, eighth, and ninth grades in three junior high schools.

Under a new districting plan, the entire city has been redistricted and the children for the first time in recent years have been assigned to schools in the districts in which they reside.

An activity program for the elementary schools has been organized, with Miss Ruth Swickey as elementary supervisor.

The curriculum of the senior high school has been revised and adjusted to more nearly meet the needs of the students in the light of modern demands.

A new budget for the school year 1934-35 has been adopted, providing for an increase of \$50,000. The increase has been made to cover a 2½ per cent increase in teachers' salaries effective during the school year.

School buildings and grounds received greater attention during the past year due to FERA projects and increased local appropriations.

The school officials of Stamford are of the opinion that the schools are definitely out of the depression.

COMING CONVENTIONS

December 26-28. Pennsylvania State Education Association, at Harrisburg. Mr. J. Herbert Kelley, 400 N. Third St., Harrisburg, secretary.

December 26-28. Illinois State Teachers' Association, at Springfield. Mr. R. C. Moore, Carlinville, secretary.

December 26-28. National Commercial Teachers' Federation, at Chicago, Ill. Mr. B. F. Gates, Waterloo, Iowa, secretary.

December 27-29. Associated Academic Principals of New York State at Syracuse. Mr. Daniel G. Allen, Boonville, secretary.

December 27-29. Ohio Education Association, at Columbus. Mr. F. E. Reynolds, Columbus, secretary.

December 28-30. Modern Language Association of America, at Swarthmore, Pa. Mr. James Taft Hatfield, Northwestern University, Evanston, Ill., president.

January 11-12. Montana School-Board Association, at Helena. Mr. E. L. Marvin, Billings, secretary.

February 23-28. Department of Superintendence, at Atlantic City, N. J. Mr. S. D. Shankland, Washington, D. C., secretary.

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Not by accident is Neo-Shine in greater use today than ever before. By its strong resistance to shuffling feet and grinding heels, it has shown countless school executives the way to new savings.

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Teachers and Administration

Lewiston, Idaho. The school staff has been increased in size by the appointment of two additional teachers, to meet a large increase in enrollment in the junior and senior high schools. The turnover in the staff this year amounts to 20 per cent, which has been attributed largely to marriages and new positions taken by former teachers.

Sick leave on full pay, three days each semester, has been re-established by the school board, after a lapse of three years. It was voted to give all teachers an average increase of 12½ per cent in salaries for the present school year.

The teachers of the city schools, at a meeting in October, organized a local teachers' association, and elected Miss Jessie McGhee as president, Miss Ruth McDonald as vice-president, and Mr. D. S. Thornton as secretary-treasurer.

Lewiston, Idaho. The board of education has received a report on a survey of the teachers, which showed that practically one half of the school staff were in attendance at summer schools during the past summer. All teachers have attended a summer session at least once during the past four years.

Governor Lehman, of New York State, in addressing the seventieth meeting of the University of the State of New York in Albany, on October 18, affirmed his belief in the value of state teacher training. Speaking on the subject of "The Ability of the State to Support Teacher Education," the governor said that he believed in the old saying that, "As is the teacher so is the school." "New buildings, modern equipment, and materials of instruction are vital factors in education," he said, "but in my judgment the most important single factor is the teacher." He urged that the state limit the number of its normal schools and other state teacher colleges, but that it endeavor to improve the facilities of its present institutions so that the students may be selected and prepared for this important service.

New Bedford, Mass. The school board has adopted an amendment to its rules, providing that principals, teachers, and supervisors who are absent for any cause for more than one week shall have deducted from the

annual salary an amount equal to one fortieth of the annual salary for each week of such absence, or a proportional part thereof for any part of the school week.

Claymont, Del. The public schools are this year carrying out an extensive citizenship program in an endeavor to substitute desirable pupil activities for undesirable pranks frequently practiced by boys and girls during the Halloween season. The school sponsored Halloween festivities and parties for students of all ages and special programs were conducted in all of the school departments. In each instance the importance of harmless enjoyment of the season was emphasized. The citizenship program has been carried out for the past five years and the local police department has reported few damages to property during this season.

The Huerfano County High School and the public school system of Walsenburg, Calif., have co-operated in an administrative scheme under which one superintendent serves both institutions. Mr. S. M. Andrews, a member of the faculty of Walsenburg, has assumed the duties of superintendent.

Montrose, Colo. The school board has restored manual arts and home economics to the school curriculum for the school year 1934-35. These subjects were discontinued during the past year.

Mr. W. Espy Albig, deputy manager of the American Bankers' Association, in a recent statement, said that school savings deposits are steadily on the up-grade. The net increase during the year closing June 30, 1934, was \$3,690,560 over the volume of business the preceding year.

A six-year high-school organization has been inaugurated at Norris, Tenn., under the direction of Principal J. D. Williams. The new plan replaces the former eight-four organization.

Newton, Mass. A modification of the so-called markless system now used in the city schools has been recommended to the school board by a special subcommittee. The suggestion was made as a result of a protest over the no-marking system by the parent-teacher association and other school groups.

Under the proposal, the present plan will be followed in the kindergarten and first three grades. In the intermediate grades, the progress letter will be used, with the teacher reporting the pupil's progress to the parent. In the third group, grades seven to nine, the junior high school, the progress letter and report card are to be combined. The teacher will rank

the pupil as O, outstanding; A, average; and P, poor, in the various subjects. The changes are to take effect immediately.

Fitchburg, Mass. The board of education has approved the recommendations of the mayor and Supt. J. M. McNamara, providing for a new set of rules for the placing of teachers on the approved list. The rules provide for two classifications of teachers. Class A divides teachers into those with four years of normal training, plus outside degree, but no experience; those with four years of normal, plus two years' experience; those with three years of normal, plus three years' experience; those with two years of normal, plus four years' experience, with practice teaching equal to one third- and one fourth-year rating.

Class B divides teachers into those with four years' normal training and no experience; those with three years of normal and one year's experience; and those with two years of normal and two years' experience.

Tulsa, Okla. The school board has given contracts to teachers, calling for the payment of salaries on a monthly basis instead of the yearly plan. The change makes it possible to close the schools in case the school revenue becomes inadequate.

Four opportunity classes have been established for retarded pupils at Fairfield, Conn. Manual training and physical education have been added to the grade-school curriculum this year.

SURVEY OF THE TRAINING OF TEACHERS

A survey of teacher training was recently completed by Mr. Frank A. Jensen, superintendent of schools, Rockford, Ill., which showed that the typical elementary-school teacher has from 70 to 79 semester hours of training, 10 to 14 years of experience, 8 years of experience in the city schools, and is from 30 to 34 years of age. The survey also showed that 71 per cent of the elementary-school teachers are local residents, and that 98.3 per cent of them are females.

The typical junior-high-school teacher, according to the survey, has from 120 to 129 semester hours of training, 10 to 14 years of experience, 10 to 14 years of experience in city schools, and is 30 to 39 years of age. Of the junior-high-school teachers, 75.6 per cent are female, and 77.4 per cent are local residents.

The typical senior-high-school teacher has from 140 to 149 semester hours of training, 10 to 14 years of experience, 10 to 14 years of experience in the city schools, and is from 40 to 44 years of age. Of the senior-high-school teachers, 65.5 per cent are female, and 64.7 per cent are local residents.

How Schools Buy Supplies and Equipment in the Depression Years

Methods of Control, Specifications, Quality, and Quantity

In view of the fact that the school authorities throughout the United States have, in many instances, been obliged, owing to a lowered income, to modify their plans of purchasing school supplies and equipment and to adjust themselves to a reduced staff in their administrative offices, a series of questions were formulated and presented to the larger and medium-sized cities.

These were submitted to the secretaries of boards of education, business managers, superintendents of supplies, and in many instances directly to the superintendent of schools or his assistants. The questions relate to the maintenance of a purchasing department, the power of initiative in the selection of supplies, the subjection of products to given tests, control, inventory, and the like. The first question asked was:

Question No. 1. Do you maintain a purchasing department on as extensive a basis as existed before the depression?

Out of a total of 104 cities, the number of cities that responded in the affirmative were 81; those in the negative, 16. The exceptions were as follows: Kalamazoo, Mich., added certain office duties to the purchasing agent's position. Portland, Me., cut supplies by 10 per cent. San Francisco maintains the same setup, but has reduced its purchases. Youngstown, Ohio, one clerk less. The following cities do not maintain school-supply purchasing departments: Charles, S. C., Huntington, W. Va., McKeesport, Pa., Miami, Fla., Mount Vernon, N. Y., and Norfolk, Va.

Where is the Initiative Placed?

Question No. 2. In your purchasing department, does the initiative for the selection of equipment and supplies come from the educational department?

The affirmative answers numbered 77; negative, 6. The exceptions noted are the following:

Berkeley, Calif., instructors are consulted as to standards. The purchasing department reserves the right to reject certain recommendations if the instructor cannot prove that the article in question is inferior in utility, quality, and workmanship.

Boston, Mass.: As a rule the educational department takes the initiative, but in many instances this is reserved to the business manager.

Camden, N. J.: On equipment, the educational department determines, in supplies it does not.

Denver, Colo.: The educational department determines upon strictly educational supplies and equipment. Custodian's supplies and upkeep of grounds and building equipment are in charge of business department.

Elizabeth, N. J.: Educational supplies only are within province of educational department.

Greensboro, N. C.: Part of supplies come within educational department.

Harrisburg, Pa.: Orders originate with educational department. Final selection and purchase rest with purchasing department after proper inquiry and investigation.

Huntington, W. Va.: No, we find educational department not very practical on equipment and supplies, but inclined to be extravagant in supplies.

Kenosha, Wis.: Yes and no. It's a matter of co-operation.

Lincoln, Nebr.: The educational department usually selects unless information or experience of purchasing agent prompts otherwise.

McKeesport, Pa.: Educational department has initiative on all equipment and supplies pertaining to educational side of the schools but not for the physical equipment, for repairs and maintenance of buildings and grounds.

Troy, N. Y., Memphis, Tenn., Miami, Fla., Port Arthur, Tex., school supplies, yes; janitorial supplies, no.

Oakland, Calif.: In purchase of supplies and equipment, specifications are based upon conferences between educational officers and purchasing department. On others in conferences with educational department and the building and grounds department.

Pittsburgh, Pa. We do not rely entirely upon educational department.

Sacramento, Calif.: Initiative for equipment and supplies for educational service taken by deputy superintendent. The selection of materials for construction and maintenance comes through business office.

Sioux City, Iowa, Toledo, Ohio: For educational equipment and supplies only.

Wheeling, W. Va.: The purchasing committee consists of superintendent, assistant superintendent, and chief clerk.

Wilmington, Del.: Selections originate with principal of each school. In case of equipment, the recommendations of the business manager come into play. His recommendations are the result of personal visits to the schools.

Worcester, Mass.: Yes, with the exception that the purchase of stationery and supplies which have been standardized so far as their use in this department is concerned require no initiative.

What Tests Are Applied?

Question No. 3. What tests do you apply to equipment and supplies to insure proper educational service and their quality?

The answers here vary considerably. In the main, past experience in selecting equipment and supplies and the service they have rendered govern the purchases. The articles purchased are compared with samples and specifications. Certain articles are subjected to laboratory tests in order to determine their quality. In many instances, the reputation and reliability of firms dealt with give assurance of the dependability of the goods purchased. A few of the characteristic replies are herewith presented as follows:

Akron, Ohio: Experience. Past performance. Special laboratory tests.

Atlanta, Ga.: We have specifications used in purchasing certain materials. When these materials arrive, if they are of such nature, laboratory tests are made, and such things as coal are tested regularly to see that they meet specifications. Other articles are carefully checked as used, in order to determine whether they meet the claim of the company which sold them.

Baltimore, Md.: All supplies are carefully checked against specifications. In some cases, chemical tests are made, in other cases various performance tests are engaged in.

Berkeley, Calif.: The purchasing department has worked out many tests for supplies that will prove whether or not materials meet certain specifications. Many chemical tests are also made. Such information as we have is free to other school departments for the asking.

Dallas, Texas: In most instances the test of previous experience is applied. Attention is given to quality, realizing that the cheapest is not always the best.

Decatur, Ill.: We usually buy on specifications and try to continue the type of goods that have been satisfactory in the past.

Evansville, Ind.: Items that are questionable are tested in the school by experimental methods or by usage.

Harrisburg, Pa.: Actual and practical use and consultation with heads of departments in which material is to be used.

Hoboken, N. J.: We accept only standard articles.

Houston, Tex.: Various tests—on papers, weight, etc.; on crayons, chemical, etc.; on chairs and desks, strength, etc.

Lincoln, Nebr.: Paper stock is about the only thing we give any test. Other items are chosen on the basis of past experience.

Portland, Me.: We obtain bids accompanied by samples, prior to placing orders for about one year's supply of the major items carried in our stockroom (though bulkier items such as cheese-cloth and blanket ends are ordered in large quantities as needed). We test samples as best we can before ordering.

Responsibility and Control

Question No. 4. Is your business manager or purchasing agent specifically responsible for keeping himself informed on new materials and equipment? Does your office maintain reference files on available school equipment and supplies?

The result here shows that 97 cities answered yes on both questions. The comments, together with some exceptions, are noted as follows:

Berkeley, Calif.: Yes. All advertising matter, as well as any other information, is carefully studied and filed by article. Good and bad points noted when articles used are carefully studied and record made of "findings" and filed.

Columbia, S. C.: We have no business manager. We maintain fields for supplies and equipment. Building supervisor recommends building and janitor supplies. Instructional materials are referred to principals and departmental heads.

Denver, Col., Decatur, Ill.: Keep files only in a limited way.

Lincoln, Nebr.: We maintain some files covering various types of equipment. We endeavor to keep our catalog files up-to-date. Any new type of equipment or supplies coming to the attention of the purchasing agent is referred to those likely to be interested in them.

Macon, Ga., Norfolk, Va.: Maintain files in a limited way.

Oak Park, Ill.: Catalogs and other advertising materials are filed in the office of the board of education for reference. Sample materials are placed in cases for examination. Records are kept of the date of purchase of furniture and other forms of equipment and constant check made as to repairs and cost of upkeep.

Pontiac, Mich.: We are constantly improving our technique. Cross-reference files are maintained.

St. Louis, Mo.: It is the duty of the supply commissioner to keep himself informed on new materials and new equipment. It is also the initiative duty of the educational departments to do so. Our office does maintain reference files on available school supplies and equipment.

Springfield, Mass.: Requests for new materials and equipment are subject to the approval of the superintendent or the board. Reference files are kept.

Worcester, Mass.: Business manager keeps posted. Agents are referred to educational department for opinion on practical value for instructional and educational purposes.

Large or Small Quantities

Question No. 5. Do you buy major articles in relatively large quantities anticipating annual requirements, or do you buy small quantities as needed?

The number of cities buying in relatively large quantities or whole year's supply is 81; those buying as needed, 9. The comments, which follow here, are as follows:

Los Angeles, Calif.: Annual purchases made on some items and small purchases on items carried locally, price being considered a factor.

Lynn, Mass., Pittsburgh, Pa.: Purchase twice a year on basis of needs.

Mount Vernon, N. Y.: If market seems right, we buy large quantities. Otherwise not.

Berkeley, Calif.: A purchase history is kept, and when money can be saved or service improved, purchases are made.

Youngstown, Ohio, Cranston, R. I., Elizabeth, N. J., Irvington, N. J., Columbus, Ohio: Major articles in quantities, minor as needed.

Richmond, Va.: Large quantities twice a year. Smaller quantities — emergencies — oftener.

Adjustments Due to Economic Conditions

Question No. 6. To what extent have you adjusted your purchasing policies to reduced revenues and changed business conditions? Have you been able to effect savings through (a) changes in specifications, (b) improved purchasing methods, (c) closer control of inventories, (d) limitations of use of materials and equipment?

The answers here vary considerably and do not on the whole lend themselves to general classifications. While most of them report limitations, some half dozen report no change. Yet a number of characteristic answers prove illuminating. Here are some:

(Concluded on Page 58)

HIGHEST DEGREE

OF ECONOMY

AND QUALITY FOR

MANUAL TRAINING CLASSES



WITH

GENUINE MASONITE PRESWOOD

ECONOMY is, after all, an important matter to manual training teachers. Inferior materials are often difficult to cut up into needed sizes. They may damage tools. Cause pupils to encounter difficulties in working with them. Finished products may not be satisfactory. In other words . . . a waste from start to finish.

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Between these dates, April 18, '34, and October 16, '34, NINE HUNDRED NINETY-SEVEN (997) other schools have ordered our Columbia Movable Desks.

Compare our prices with other quotations on any type of seating.

Plywood scroll seat furnished if desired.

Columbia SCHOOL FURNITURE Corporation

INDIANAPOLIS, INDIANA

(Concluded from Page 56)

Dayton, Ohio, Lynn, Mass.: We have effected economies on closer control of inventories and limitations of use of materials.

Lincoln, Nebr.: We have standardized on certain items, thus increasing quantity purchases. We have received larger shipments in some instances than heretofore. We also buy a little closer and carry smaller margins in stock. Some items not in great demand have been discontinued.

Little Rock, Ark.: No particular changes were needed. Minor changes, such as using base soap instead of liquid, were made.

Los Angeles, Calif.: Make carload purchases whenever possible and greater spread of competition. Have effected substantial savings through adoption of specifications, certain changes in purchases, closer control of inventories and limitation of use of materials and equipment.

Mount Vernon, N. Y., McKeesport, Pa., Memphis, Tenn., Muncie, Ind., Manchester, N. H., New Bedford, Mass., Newtonville, Mass., Akron, Ohio: Closer check on supplies. Closer control of inventories.

Oakland, Calif.: Yes to all four questions, but particularly through the co-operation of principals and teachers cutting down school inventories and in the economical use in the school. A comprehensive survey of all materials has been made with the result that a considerable number of items were eliminated without interfering with the educational program.

Oak Park, Ill.: Have changed specifications to use cheaper materials. Not sure that this has been a saving in fact. Have restricted use of certain materials of instruction and have made careful inventories.

Peoria, Ill.: (a) No, we have always purchased at lowest price consistent with quality; (b) The annual purchase basis has always obtained; (c) Maintain close control of inventories; (d) Limitations only when waste is apparent.

Pontiac, Mich.: We have cut our light-and-power bill by more economical use, and by elimination of unnecessary electrical equipment. Closer control of inventories and limitation of materials has been helpful.

Atlanta, Ga.: No change in specifications and methods or purchasing. Inventories cut down and some limitations on materials and supplies.

Minneapolis, Minn.: Our adjustments include all four of procedures stated by you. In addition, pupils are required to provide at their own expense some of supplies formerly provided at the expense of the board. Some changes in projects have been made so as to require less material to carry them out. Sewing classes have worked on Red Cross, Welfare, and other projects and the materials provided by the organizations for which the work has been done. A concentration on avoidance of waste has been stressed by the superintendent. Shorter stubs are required in the use of pencils, chalk, etc. Smaller sheets of paper for practice work, arithmetic, etc., are being issued, and use is required on entire surface of both sides. More blackboard work and less seat work. And a score of other means for saving has been observed.

RELATION OF THE UNIVERSITY TO THE SUPERINTENDENT

(Continued from Page 41)

fession. Investigations have shown that there is no single factor of prognosis that is of any great value in predicting success in the teaching profession, but it is known that many factors are influential in the development of satisfactory teachers. Under present conditions, the administrators in the public-school system who have associated with these young people for twelve years are probably in a better position than anyone else to furnish information to teacher-training institutions concerning the graduates of their high schools who give most promise of success in such a career.

After institutions for the preparation of teachers have finished their work, the school superintendents should then be willing to give these young people an opportunity to work in their school system, fully realizing that they are not completely trained; that they will need much sympathetic assistance and advice before

they become master craftsmen. A school superintendent should furnish the university information in regard to the deficiencies in preparation of young teachers whom he has employed. This should be given without rancor and should be accepted in the same spirit. He should be willing to give constructive suggestions for the improvement of training programs, and the institutions should request and welcome such suggestions. One of the weaknesses in the training program for teachers has been the lack of attention to deficiencies in preparation that have appeared in the work of teachers in the public schools. Institutions for teacher training tend to consider the problem from a theoretical point of view; the school superintendent is inclined to emphasize the practical aspect of the teacher's duty. By working together, each will recognize all the factors involved in a program for the preparation of teachers and better results will thereby be obtained.

In summarizing, neither the school superintendent nor the state university should lose sight of the fact that the university is a part of the public-school system; that the difference in function is largely in area of work; that the public-school system should work out its own curriculum to meet the pupils' needs; that the university should not attempt to dictate what should be offered in the schools below its own level; that graduates of the public high school should have no more difficulty in entering the university than the eighth-grade pupil has in entering the ninth grade; that the best method of securing integration in the different areas is to realize that goals are similar; that the best means of securing proper integration is through conferences and discussions by representatives of the different levels; that the superintendent should be ever alert to guide his graduates to the institutions in which their future education would be most profitable to them as citizens of



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the state; and that the training of teachers is a co-operative enterprise, which must be studied carefully without bias, and without prejudice, if our schools are to achieve their high purpose.

ANNUAL HEALTH INSPECTION SHOWS IMPROVEMENT IN STUDENTS' HEALTH

The annual health inspection of pupils in the public schools of Claymont, Del., was conducted at the opening of the school term, under the direction of Dr. D. T. Davidson, the school doctor, with the assistance of Miss Mary Miller, the school nurse, and Mrs. Paul Collins, oral hygienist.

The inspections showed a decided improvement in the health of the students over the past year. There were fewer cases of malnutrition, and more remedial and correctional work was indicated than during the previous school year.

According to the medical inspector, the average number of defects was one and one half. In other words, two children on the average had three noticeable physical defects of all pupils examined, 82.8 per cent had one or more physical defects; 17.8 per cent were perfect in health; 75 per cent of the defects were due to poor teeth; 22.5 per cent of the children were in the malnutrition group; 6.7 per cent had defective vision; 2.4 per cent were heart cases; 4 per cent had tonsil and adenoid trouble; less than one half of one per cent had defective ears; and 1.8 per cent had skin conditions.

During the school year, the nurse is co-operating with the parents in bringing about the correction of physical defects uncovered during the annual health inspection.

The school system employs a school dentist on a part-time basis, to look after absolutely unavoidable extractions, and to give talks on the care of the teeth.

The school nurse takes groups of children to the health clinics in Wilmington, where free health services are available to a limited number of needy cases.

The homeroom teachers and the directors of health education in the school, also co-operate with the school doctor and school nurse in the health work of the school. Daily health inspections take place in the homerooms.

The board of education regularly requires that all pupils be vaccinated for smallpox protection. The State Board of Health gives the diphtheria inocula-

tions to the boys and girls. At the present time diphtheria protection is afforded to about 90 per cent of the total school enrollment in the community.

CHICAGO HIGH-SCHOOL LUNCHROOM SYSTEM IMPROVED

The reorganization of the high-school lunchroom system in Chicago, Illinois, ordered by the board of education last spring, has brought about an increase of 33 per cent in pupil patronage. The cafeterias were operated without a deficit during the first month of the school term. The improved condition of the lunchroom system has been described by Mr. F. O. Wisham, recently appointed manager of the system, who points out that the improvement in the finances of the system has afforded the serving of more food at a reduction in cost to the students.

According to Mr. Wisham, the lunchrooms last year, under the old system, served 27.8 per cent of the total high-school student body. This year, during October, they served 37 per cent. The actual numerical increase was greater than the percentage figure, due to the large increase in high-school enrollment.

Centralization of purchasing has made possible a greatly improved service. For example, last year 12 per cent butterfat ice cream was purchased, at a cost of 80 to 90 cents a gallon at the various schools. This year the lunchrooms pay 75 cents a gallon for 14 per cent butterfat ice cream, and in addition have their serving equipment maintained without charge.

Through the purchase of foodstuffs early in the summer, thousands of dollars were saved. Charts on the walls of the lunchrooms permit an immediate checking of the operation of individual rooms. Thus, when the Hyde Park School chart showed only a 15 per cent patronage, an inspection revealed a poorly located room and wornout equipment, and these defects were immediately corrected.

During October last year the revenues to the school lunchrooms amounted to \$65,000, and this year were well over \$70,000. Menu prices have been kept the same, despite the 20 per cent food-cost increase, and larger food portions have been allowed throughout the system. Last year the lunchroom system was operated at a loss of \$10,159.

BOARDS OF EDUCATION

♦ Cranston, R. I. The board of education has voted to have bimonthly inspections of all school buildings

for the purpose of minimizing the danger of fire and providing safety in case of fire.

Under the plan, the inspection is to be made jointly by the school principal and the janitor, and at least once annually by a member of the school board, a member of the fire department, and the supervisor of buildings.

♦ Cincinnati, Ohio. The board of education has employed Miss Bess Goodykoontz, of the U. S. Office of Education, as director of a survey of the public-school system. The survey is being conducted by B. O. Skinner, Director of the Cincinnati Bureau of Governmental Research.

♦ Hartford, Conn. The board of education has taken up the problem of a salary schedule for school physicians and dentists. Under the new schedule, the salary is computed on an hourly basis, with the rate of pay ranging from \$3 to \$4, according to the experience of the doctor in schoolwork. It provides for regular hours of service for 38 weeks by physicians, with additional allowances for emergency service, consultation program, etc. For dentists the program provides for 36 weeks of service, with 34 weeks of service and allowances for emergency service.

The individual physicians will work on a predetermined schedule, ranging from three to eleven hours a week, according to the service necessary in the school buildings to which they are assigned. The two doctors who direct the work will receive an annual salary of \$2,520 each, and the men who are on a time basis will have an income ranging from \$324 to \$1,008. A special allowance will be made for the psychiatrist.

♦ Under the new provisions of the 1934 laws of Kentucky, election of members of boards of education of nonrotating membership must be held at the general election, instead of at midyear elections. The law provides that these boards shall be rotating, with some members elected every two years. Boards to be elected under the new law this year are to choose by lot which members will serve for two-year terms and which for four-year terms.

♦ Westport, Conn. The school system is returning to its former standard. A number of activities, including kindergartens and physical education, have been resumed after being discontinued during the past year. Approximately one third of the salary cut has been returned to the teachers.

♦ Macomb, Ill. The board of education has adopted a new policy, which bars from school buildings all nonschool functions for which a charge is made.

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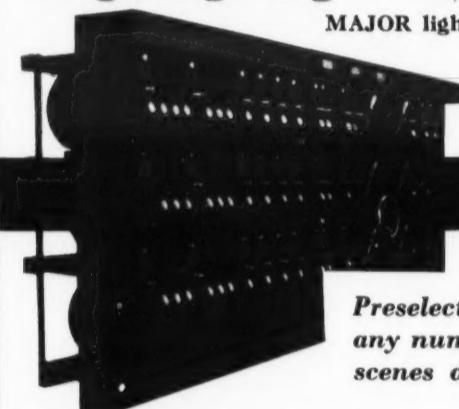
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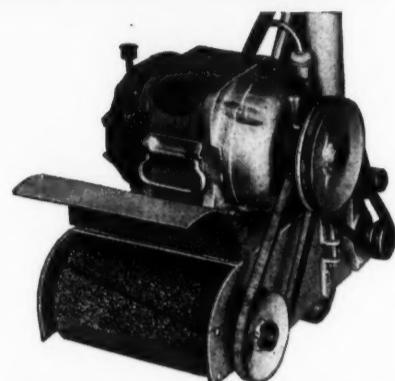
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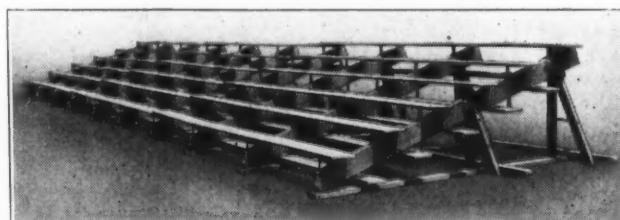
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FINANCE AND TAXATION

♦ Dr. E. L. Morphet, director of the division of research of the Alabama State Department of Education, has issued a report showing that it will require between \$3,250,000 and \$3,500,000 of federal aid to supplement the state and local funds, if the public schools of the state are to be kept open for normal terms during the school year 1934-35. The information was obtained as a result of budgets submitted to the state department of education by all but four county and six city systems of schools.

On the basis of state and local school finances on hand or to become available, there are only about ten cities and three counties in the entire state that will be able to keep their schools operating for normal terms, and in a number of counties of the state, the schools will be compelled to close unless additional funds are received.

♦ Minneapolis, Minn. The board of education, despite pressure by various groups, recently voted to stand by its decision to fix the tax levy at 22 mills which, with the mandatory tax of 1 mill, makes a total of 23 mills for school purposes during the year 1934-35. This levy, according to Supt. C. R. Reed, will leave the schools a shortage of \$530,000, compared with this year's budget, and a shortage of over \$2,000,000 when compared with the amount considered necessary to maintain an efficient school system. The board indicated that it stood ready to co-operate in any plan to broaden the basis of taxation and to relieve the present heavy burden which rests upon real estate. This problem is to be solved at the next session of the state legislature.

♦ Lewiston, Idaho. The board of education closed the fiscal year 1934, with a balance in the treasury. Delinquent tax resources, it was believed, would be more than sufficient to operate the schools for a half year.

According to estimates of the board, the total budget of expenditures for the year 1934-35 will be about 18 per cent over that for the year 1933-34. The new budget included an appropriation for the use of the superintendent in providing substitutes for teachers and clerical helpers in avoiding overload relief.

♦ New Bedford, Mass. The board of education has asked Supt. Allen P. Keith to confer with the mayor in finding ways and means of raising \$7,500 necessary to keep the schools in operation for a forty weeks' term. Superintendent Keith has reported to the board that a deficit has developed through the employment of married women at the maximum pay, the opening

of six new first grades, the purchase of textbooks, and the cost of operating a summer school. He estimates that the school department has spent from \$3,500 to \$4,000 on ERA repairs.

♦ Greeley, Colo. The school budget for the year 1934-35 remains the same as for the past school year. The board of education is continuing its program of reducing the bonded indebtedness. No increase in salary schedules has been anticipated.

PERSONAL NEWS

♦ Mr. JOSEPH L. ERNST has been appointed as assistant purchasing agent for the board of education of Rochester, N. Y. Mr. Ernest, who was appointed from the civil-service list, was formerly employed by a local hardware firm and gained his purchasing experience from his association with various business houses.

♦ DR. THOMAS S. O'CONNELL, of Hartford, Conn., has been re-elected as president of the board of education. Dr. O'Connell has completed forty years of service as a school visitor and member of the board.

♦ Mrs. HENRY YOUNMANS has been elected a member of the school board at Waukesha, Wis. Mrs. Youmans takes the place of John Enders who was not re-elected.

♦ Mr. CHARLES E. GILBERT, secretary of the board of education of Chicago, Ill., for the past fourteen years, has resigned from the office. MR. F. H. LANDMESSER was appointed to succeed Mr. Gilbert.

♦ The board of education of St. Louis, Mo., has reorganized for the year with the election of DR. SOLON CAMERON as president, and MR. HENRY P. SCHROEDER as vice-president. Personal News

♦ Mr. S. HOWARD CHACE, superintendent of schools of Beverly, Mass., died at his home on October 28, after a notable record of 21 years of school service.

♦ Dr. ROBERT R. MOTON, president of Tuskegee Institute, has resigned after nineteen years of service as head of the Negro college in Alabama founded by Booker T. Washington. His retirement marks the completion of 45 years of service in educational work.

♦ Mr. GEORGE W. EARLE, for a quarter century headmaster of the Hyde Park High School, in Hyde Park, Boston, Mass., has been retired and given the honorary title of headmaster emeritus, in appreciation of his many years of service in the Boston schools. A reception was given for Mr. Earle by the Hyde Park Board of Trade, to which his former pupils, friends, and school associates were invited guests. Mr. Earle was officially retired on August 31, but the honorary title was given to him on October 11.

♦ DR. ELMER B. BRYAN, president of Ohio State University, died on October 15, in the Ford Hospital, Detroit, Mich. Death was due to a cerebral hemorrhage, following a year's illness. Dr. Bryan was graduated from the Indiana State Normal School in 1889, and from the Indiana University in 1893. He was a teacher and principal for some years after graduation. In 1894 he was appointed professor of social and educational science at Butler College, and three years later he joined the faculty of Indiana University. He was president of Colgate University, resigning in 1921 to become head of Ohio University.

♦ Mr. HARRY B. MARSH, formerly principal of the Technical High School, Springfield, Mass., has been named as assistant superintendent of schools. He succeeds Dr. Z. E. Scott, who resigned some time ago.

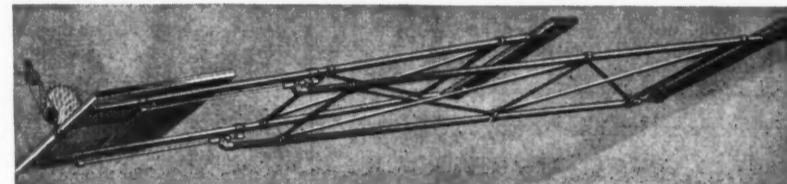


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♦ MARTIN F. WORTHMAN, 51, superintendent of schools of Decatur, Ind., for 18 years, died in a hospital on October 20, following an illness of two years. Mr. Worthman was educated in the schools of Marion, Ind., and took advanced work in the Tri-state and Indiana State Colleges and in the Chicago University.

♦ DAVID B. OLIVER, known to thousands of school children in Pittsburgh, and a leader in educational affairs in Pennsylvania, died on October 21 at his home. Mr. Oliver, who would have reached the age of 100 years in a week, was early identified with the steel interests but retired in 1901. He had since been actively engaged in the improvement of school conditions of his city and state.

♦ DR. ARCH T. ALLEN, for eleven years State Superintendent of Public Instruction of North Carolina, died at a Raleigh hospital on October 20, following a long illness with a kidney ailment.

Dr. Allen, who was 59, had been connected with the schools of North Carolina since his graduation from the State University in 1897. He became an official of the state education department in 1917, and in June, 1923, was appointed state superintendent. Dr. Allen was head of the state school system during the period of its greatest development and saw the school appropriation grow from the small state literary fund into the millions of the state equalization fund.

♦ MR. W. BRADLEY KELLOGG is the new member of the school board at Westport, Conn. The board has reorganized with the re-election of MR. R. W. FULLER as chairman, and Mrs. EUGENE MCKENNA as secretary.

♦ A political miracle has happened. Miss AGNES SAMUELSON, Iowa's State Superintendent of Public Instruction and a member by election of the Executive Committee of the National Education Association, received unusual recognition in the recent state election, by being returned to office for a third term by the unanimous vote of the people of Iowa. Because of her co-operation, efficiency, and the general satisfaction with her administration, both major parties united in her support.

♦ West Allis, Wis. The school board has named the high school the T. J. Jones Senior High School, in memory of the late T. J. Jones who was affiliated with the school system for many years.

SUPT. R. C. HALL HONORED

More than 300 teachers of the public schools of Little Rock, Ark., paid tribute on November 3 to R. C. Hall, superintendent of schools and the 35 teachers who have served with him during the past 25 years, in a silver-jubilee dinner, given in the Woman's City Club. Miss Annie G. Griffey, assistant superintendent of schools, was toastmaster.

A pageant was participated in by 25 teachers. Mrs. Dell McDermott read a verse to Mr. Hall and the 35 teachers, while Miss Gene Toland presented to each one a knot of silver ribbon which contained a silver quarter, a gift of the teachers' association. Miss Annie G. Griffey read excerpts from the first speech made to the teachers 25 years ago by Mr. Hall. Mr. J. H. Hollis, one of the members of the board of 25 years ago, paid tribute to Mr. Hall's work. Mr. J. G. Pipkin, business manager of the board, dressed as a mystic, foretold amazing developments in the school system.

Mr. Hall, in short response, told the teachers he wished to think of the occasion as celebrating 25 years of progress in the schools. He said the 25 years had been a period of thrills and adventure for him and that it was through their sympathy and support that he had been able to lead the schools to their present accepted place.

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MILWAUKEE SAVES BY CARRYING ITS OWN RISK ON SCHOOL BUILDINGS

The taxpayers of the city of Milwaukee must stand the full loss in repairing damage caused by a \$30,000 incendiary fire at the Victor Berger School on October 22, 1934, but the city has saved large sums in assuming its own risk on school buildings in the past twenty years.

This fact has been shown in a check of the losses from school fires since 1915. The total losses amount to about \$150,000, based on the cost of repairing damages, which in each case amounted to nearly twice the local fire department's estimate of the loss.

The 105 school buildings in the city, according to the school board's figures, are valued at \$27,000,000. Assuming a low average insurance rate of \$5 on each

\$1,000 of valuation on insuring these buildings at 80 per cent of their value, an annual premium of approximately \$110,000 a year would be required.

With the exception of the Auditorium, the Public Library, and the Museum, which are the only buildings insured with private risk firms, the city follows the same policy as the school board, acting as its own insurance company.

FEDERAL FINANCING OF SCHOOLS UNDER PWA

A tabulation of allotments of funds by PWA up to and including October 31, indicates that the government has made the following allowances: Number of projects accepted, 1,997; grants without loans, \$17,305,672; loans and grants, \$115,748,113; total cost of the buildings projected, \$181,327,542.

Although the government has announced that no new applications can be accepted, changes are constantly being made in the amounts allowed and applications which have been for one reason or another rejected, are being reopened and reconsidered.

Of the total grants and loans made under PWA, the schools will receive upwards of 15 per cent of the total funds.

SCHOOL BUILDING CONSTRUCTION

During the month of October, 1934, contracts for six buildings were let in the eleven states west of the Rocky Mountains. The total price of these contracts was \$1,192,493. Twenty-six further building projects were reported in the preliminary stages at an estimated cost of \$2,560,400.

In 37 eastern states Dodge reports contracts let for 320 school buildings, including a total of 1,397,300 square feet. The value of the contracts let was \$8,950,900.

SCHOOL-BOND SALES

During the month of October, 1934, the grand total of school-bond sales reported was \$5,506,823. Of these, \$2,906,330 were reported for new school-building construction. Refunding bonds in the amount of \$1,401,108 were recorded, and temporary loans, tax-anticipation notes, etc., in the amount of \$1,199,385 were reported. The largest issues for new school-building construction were New York State, \$1,250,280; Ohio, \$651,550; and Pennsylvania, \$436,900.

BUILDING NEWS

♦ Green Bay, Wis. The board of education has adopted a budget of \$588,817 for the school year 1934-35. Included in the budget is an appropriation of \$65,000 to form the nucleus of a building fund, and another one of \$3,000 as the initial payment on two new school sites. The building fund will cover one half of the cost of a new school to replace the present Woelz School.

♦ Chicago, Ill. The school building bureau of the board of education has received bids for the construction of two new elementary schools to house 1,875 pupils and to cost \$300,000 each.

♦ Lewiston, Idaho. During the past summer, the board of education completed major repairs to the heating plants in three school buildings.

♦ Claymont, Del. The school board has awarded a contract for the construction of a second addition to the Central School. The building, which provides space for a cafeteria, an industrial-arts department, mechanical drawing and printing rooms, a gymnasium, and a playroom, will be completed about the first of the year. The construction work will be financed with the aid of PWA and state school funds amounting to a total of \$152,000.

♦ The football field of the County High School at Walsenburg, Calif., has been provided with modern standard lighting equipment. The equipment is to be paid for from proceeds of summer softball games.

♦ Montrose, Colo. The school board has completed plans for the erection of a new building to replace an old structure. The building will be financed through a federal grant of \$22,000, a bond issue of \$37,500, and cash on hand in the building fund amounting to \$17,500.

♦ Pasadena, Calif. The voters of the city school district, on October 26, approved a bond issue in the amount of \$375,000. The proceeds of the bond issue will be used for the reconstruction and strengthening of the buildings at the Pasadena Junior College, the Washington Junior High School, the McKinley Junior High School, and the Marshall Junior High School.

The board has \$410,000 in cash on hand, and has applied to the PWA for a grant of \$311,000 to be placed with the funds available, the money to be expended for strengthening the buildings. The completion of the work will involve an expenditure of slightly over \$2,000,000.

♦ Corvallis, Oreg. The school board has awarded contracts for the construction of a senior high school to cost \$300,000. The building will be financed through PWA funds.

♦ Kansas City, Mo. The board of education has received bids for the construction of a new senior high school to replace the present Lincoln High School. The building which will be of fireproof construction, will accommodate more than 1,000 Negro students, and will be completed at a cost of approximately \$600,000. Charles A. Smith, of Kansas City, is the architect.

♦ Richmond, R. I. The taxpayers recently voted to discard the six small buildings in use and to consolidate all the schools of the town in a new central building. The building which is being erected as a PWA project, will contain nine classrooms, an auditorium, and a cafeteria.

♦ Chicago, Ill. The board of education has announced the sale of \$2,000,000 of 1934 tax warrants to a syndicate of Loop bankers. The money is to be used for school payroll purposes. The warrant sale followed a program of such sales announced last August, at which time it was found that sufficient salable warrants were available to pay school employees up to January, 1935.



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THE FLORHAM PARK SCHOOL

(Concluded from Page 35)

future school needs and for conferences and meetings. The equipment includes desks, counter desk and files, conference table, store- and bookroom, toilet facilities, master address and radio panel, master-clock and program-plug panel, electric convenience and telephone outlet boxes in walls, and window screens.

The classrooms are equipped with unit ventilators of the latest de luxe type. Individual control by thermostat is provided for units and for the direct radiation. Ample electric lighting is provided as well as outlets for visual instruction and other usage.

The furniture is Early American in design and finish, with turned supports on all pieces and all furniture in the rooms is harmonious in design. The teachers' desks, the teachers' chairs, and file units are a distinct departure from ordinary school equipment. The rooms are arranged for group work with movable seating, revolving book files, and gate-leg tables. The furnishings have a uniform design motif and finish throughout the building.

Ventilated wardrobes connected directly to the vent flues are built in the rear of each room and contain a section for teachers' wraps and storage.

The heating system is a vacuum-steam installation consisting of two tubular steel boilers equipped with oil burners operating automatically.

The assembly is ventilated with a large fan and aerofin unit.

The woodwork is chestnut throughout, except in rooms where special finish has been provided in connection with architectural treatment. The floors are maple throughout, except in rooms where special floors of tile, linoleum, or composition tile have been provided.

The building is equipped with an address

and radio system with the control in the office and outlying speakers in all instructional rooms. A system of master and secondary clocks has been provided throughout, including clock in cupola, all actuated from one source and operating automatically to ring bells on any pre-arranged schedule.

The building is of fireproof construction, is equipped with fire extinguishers set in recessed cabinets in walls and fire hydrants on the school grounds, thus securing the advantage of the lowest rates on insurance.

The building is so planned that future extensions can be made.

The project, including furnishings and improvement of site, represents an expenditure of \$187,000.

TECHNIQUES FOR PLANNING SMALL HIGH-SCHOOL BUILDINGS

(Concluded from Page 38)

article. This room was designed with a 12-foot deep platform stage at one end, and with storage space for music and musical instruments at the rear of the stage. The room was treated acoustically, and the kitchen so arranged that all kitchen equipment and serving tables could be shut off completely from the dining space by the closing of two ordinary doors. Thus, this room serves excellently for the teaching of music and dramatics and the holding of small assemblies, without any annoying odors or noises from the cafeteria kitchen. The combination auditorium-gymnasium was considered adequate to meet all needs of the school, either in physical education, athletics, school assemblies, or community activities.

According to the pupil-station rating of the available rooms shown in Table II, there were 607 pupil stations in the reassigned spaces of the existing building. These, with the 234 pupil

stations of the new rooms shown in Table III, total 841. The variation of this figure from the total of 885 shown in Table I results from the minor variations between the recommended and actual pupil capacities of the existing rooms.

SAN ANTONIO CENTRALIZES SCHOOL-CAFETERIA COOKING

(Concluded from Page 27)

repairs, would sometimes erase the usual net income. But the school board is not going to be that exacting. Whenever the cafeteria system's bank account shows abnormal swelling signs, the board, it appears, will just decree bigger lunches, or cheaper ones, or both.

Each month the cafeteria department prepares a cash-balance sheet and statement of operations. A statement of operations for April, 1934, though it may or may not be typical in amounts, is herewith given to illustrate the accounting:

Food Sales — Revenue for April, 1934.....	\$18,885.50
Direct Costs (Month of April, 1934).....	\$12,349.34
Food and Supplies (used).....	4,136.50
Salaries	1,059.15
Employees and Free Meals.....	410.38
Gas	108.28
Other Costs	
Total Direct Costs	\$18,063.65
Direct Cafeteria Profit (not considering depreciation)	\$ 821.85
Repairs and Replacements	32.16
Cafeteria Profit	\$ 789.69
Administrative Expense	
Executive Salaries	\$ 150.00
Office Salaries	208.00
Telephone	20.83
General Expense	72.03
Total Administrative Expense	\$ 450.86
Net Operating Income.....	\$338.83
General	8.00
Interest Earned on Daily Balance	18.11
Total Net Income	\$ 364.94

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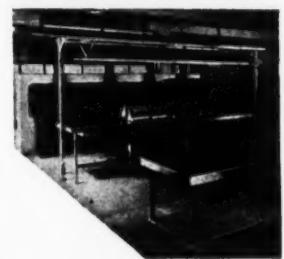
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Food Service Equipment - 526-544 GREGORY AVE.
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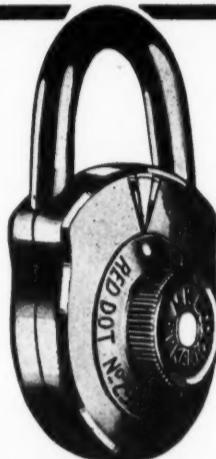


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RED DOT No. 29
Die cast case. Cadmium lacquer or chrome finish. Handsome appearance.

No. 29-S —Same lock as No. 29 in steel case. Cadmium finish. Automatic locking is an important feature.

The J. B. Miller Keyless Lock Co.
200 LOCK ST. Established 1889 KENT, OHIO

ROYAL school seating in which active growing young people are confined during the study hours has shown that there is more to a seat than merely a place to sit down.



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No. 49—Rests flush with desk top

Write for full details and free sample to Sengbusch Self-Closing Inkstand Co., 1218 Sengbusch Building, Milwaukee, Wis.

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No. 48—Has flange. Sizes to fit present holes in your desks.

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Avoid this problem with Dudley Keyless Combination Padlocks. Enjoy the simple effectiveness of Dudley furnished Master Chart Control.

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National School Desks Have Proven Their Worth

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Adjustable
Desk

National Desks are designed and constructed with the health of the child in mind. The durability of the desks and seats, and the adaptability of the desks to proper room layout and seating arrangements are also carefully and scientifically considered and included. Write us for complete seating catalogue.

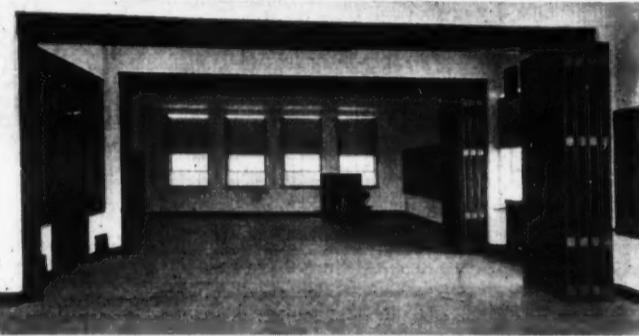
NATIONAL SCHOOL EQUIPMENT COMPANY

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SCHOOL EXECUTIVES
WRITE FOR SAMPLE
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INSPECTION



HORN Folding Partitions increase the value and usability of large rooms by enabling them to be subdivided quickly into separate, soundproof classrooms. Fully electric, fully automatic, no floor track—those are just a few of the Horn advantages. Let our engineers recommend the most practical installation in that large room of yours. Write for illustrated literature.

Horn Folding Partition Co., Fort Dodge, Iowa. Sales offices in 36 cities.

MAN'S INHUMANITY TO MAN

(Concluded from Page 16)

tine of the day's work must be begun. Most of these men could have handled the larger responsibilities if only opportunity had come their way. They have the ability.

Some of these men are elected to places on the local board of education or city council. Then comes the test. Unusual thoughtfulness and self-control are then necessary if these good citizens in private life are to be of the most use in public life. Unless unusual care is exercised, a man may imagine that his boyhood dream has suddenly come true—he is now the big man of power and influence he dreamed years ago. Too much of this recalling may be fatal to him personally and harmful to the public business which he was elected to administer. A right attitude may bring growth and usefulness; a wrong attitude is likely to bring only inflation of the ego.

In this day of peculiar difficulties and perplexing problems thousands of earnest, capable citizens are serving as interested members of boards of education, and doing it both willingly and without compensation. They are trying to do the best they know for the children entrusted to their care. They are doing this in the face of reduced finances, increased enrollments, increased living costs, and, frequently, unwarranted harsh criticism. Teachers in general are accepting the situation courageously. There are, however, a few boards of education, a few members on other boards and a few selfish, thoughtless superintendents who are displaying a pitiful bigotry which is seriously injuring teachers and helpless pupils. Much of this could be avoided if a thoughtful, magnanimous spirit, which costs so little and yields so much, could be shown by those who have been chosen

to lead and not to drive. Much, also, of man's inhumanity to man could be avoided if certain high-minded members of boards of education were willing to show a little more fight for the right. An occasional gentle rebuke issued to a weak-willed president of a board of education, a suggestion now and then to a self-centered superintendent that he should speak for the forgotten man, or woman, in the classroom, or a few pointed hints to fellow members of boards of education on the value and significance of the golden rule, might effectively prevent the feelings of resentment which appear to be spreading among teachers.

REORGANIZATION OF THE LEXINGTON PENSION FUND

(Concluded from Page 20)

\$28,000. Since there is little likelihood that the benefits payable in the next several years will reach \$20,000 and since the contribution-benefit scheme set up is amply sound with plenty of margin for the long run, the fund may now be considered as sound as it is practically possible for it to be in a city the size of Lexington. This reorganization was accomplished through the co-operation of the legislature, the city board of education, the superintendent, and the teachers. A helpful and enlightened viewpoint prevailed all around.

A CONTINUOUS AUDIT OF SCHOOL ACCOUNTS

(Concluded from Page 30)

the responsibility of fiscal affairs by the publication of such information. Such forms are cumulative and the status of one year with one, two, or more years can easily be found. The reports are simple and can be adapted to any type of accounting system for any size of

school district. The information is easily compiled and a competent clerk can soon learn to do the work and free the superintendent for other administrative work.

These forms are ordinarily made only for the board members and the office files, but at times a public meeting is advertised and the forms are mimeographed and distributed to anyone interested. Very successful P.T.A. programs have consisted in public board meetings where the status of the school district affairs was discussed and the procedure of the board was shown when acting on business to be transacted.

THE POTTSTOWN JUNIOR HIGH SCHOOL

(Concluded from Page 37)

teams, and offices for the instructors. Seating space for 1,000 persons is provided in folding metal bleachers which are set against the walls when not in use.

The building is fully equipped with furniture adapted to the special programs of the different departments. The administrative control is facilitated by a complete sound system, consisting of speech and record-amplifying system and a radio-receiving system. Loud-speakers are placed in all classrooms and special instructional rooms.

The building was erected in 1932-33. The cost was as follows: General contract, \$268,714; heating and ventilation, \$39,538; plumbing, \$11,773; electrical work, \$15,248; total cost, \$335,273. The cost of the equipment was \$52,727.

The building contains 1,638,740 cubic feet of space and cost 18.2 cents per cubic foot. On the basis of a 1,500 pupil capacity, the cost was \$225 per pupil.

After the Meeting

The Teacher's Position

So often the teacher is expected to be on all controversial matters a mugwump. My daughter defined it for me as "that animal that sits on the fence with his mug on one side and his wump on the other." — *Emery Asbury*.

Down to Facts

"My deah boy," effused the elegant lady of aristocratic demeanor to the schoolboy at the gate, "will you—ha—inform Hector Reginald Cornelius Manton-Mannington that his mother has arrived?"

"Sure, ma'am," returned the boy. Then facing the playing field he yelled, "Snifty, the old girl's blown in." — *Pearson's*.

Prudent Forgiveness

Sunday-school Teacher: "Did you ever forgive an enemy?"

Tommy Tuff-nut: "Yes, once."

Sunday-school Teacher: "And what noble sentiment prompted you to do it?"

Tommy Tuff-nut: "He were bigger'n me."

He Needed It

Teacher: "Why were you not at school yesterday, Johnny?"

Johnny: "Please, Miss, I was convalescing."

"Convalescing! From what?"

"Three apple dumplings and one of father's cigars."

How Very True!

Engineering Professor: "What is the greatest water-power known to man?"

Student: "A woman's tears."

A Secret

The teacher was explaining to the class the meaning of the word "recuperate." "Now, Johnny," she said, to a small boy, "when your father has worked hard all day, he is tired and worn out, isn't he?"

"Yes, ma'am."

"Then, when night comes, and his work is over for the day, what does he do?"

"That's what mother wants to know," Tommy explained quickly.

School Days Again

Teacher: "Now, Phyllis, if I subtract 25 from 57, what's the difference?"

Phyllis: "Yes, teacher that's what I say—who cares!"

Exposed?

"I am delighted to meet you!" said the father of a college student, shaking hands warmly with the professor. "My son took philosophy from you last year."

"Pardon me," said the professor, "he was exposed to it, but did not take it."

Best Answer

"I gave the best answer in nature study this morning, mother," said little Johnny when he arrived home from school.

"Well, I am glad," replied the proud mother.

"Yes," said little Johnny, "teacher asked how many legs an ostrich had, and I said three."

"But an ostrich has two legs."

"I know that now, mother, but the rest of the class said four, so I was the nearest."

All Very True!

Two men who had been bachelor cronies met for the first time in five years.

"Tell me, Tom," said one, "did you marry that girl, or do you still darn your own socks and do your cooking?"

"Yes," was Tom's reply.

Edison's Smartness

Teacher. "Who was the world's smartest man?"

Boy: "Thomas Edison. He invented the phonograph and radio so that people would stay up all night and use his electric-light bulbs."



Teacher: "What tense is 'I am beautiful'?"
Pupil: "Past."

Buyers' News

TRADE NEWS

Beckley-Cardy's New Building. The Beckley-Cardy Company, Chicago, Ill., manufacturers of school supplies, recently occupied its new six-story building at 1632 Indiana Avenue.

The building, which is six stories high, contains 50 per cent more space than the former building and provides space for the growth of the various departments of the firm's business.

The Beckley-Cardy Company has maintained a definite policy in which it aims to offer greater values, to serve more efficiently, and to render 100 per cent service in every transaction.

Link-Belt Acquires Modern Coal Burner. The Link-Belt Company, Chicago, Ill., has announced that it has acquired the manufacturing and sales rights of the Modern Coal Burner, a subsidiary of the Peabody Coal Company.

Under the arrangement, the Link-Belt Company also acquires the Modern Coal Burner Company's stokers. Stocks of parts have been transferred to the firm's Caldwell-Moore plant at 2410 West 18th St., Chicago, in order that there may be no interruption or impairment of the service rendered to customers.

The Link-Belt Company and the Modern Coal Burner Company have been engaged in the building of automatic stoker equipment for the past five years.

Heat Regulation Control. The Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., has just issued an educational booklet, announcing an important improvement in room-temperature-control devices.

The booklet is entitled "Heat Acceleration" and describes very completely the design and operation of the new Honeywell T-17 thermostat. This device cuts off heat before a room reaches the exact degree which it is intended to maintain. It anticipates the acceleration of heat which occurs under certain conditions of mild weather and solar radiation in which the residual heat in the radiators readily exceeds the fixed temperature which it is desired to maintain. The arrangement is such that a small amount of heat continues in the radiator or other heat-producing unit, so that the intended temperature is maintained.

A careful check of the device in 50 installations indicates that an economy of from 1 to 14 per cent in fuel consumption has resulted from this device as against the ordinary thermostat.

School officials who are interested may obtain a copy of the booklet by addressing the firm at Minneapolis, Minn.

Issue a Primer of Sheet Iron. The Republic Steel Corporation, Dept. 127, Massillon, Ohio, in a 64-page booklet, entitled "Sheet Iron, a Primer," tells the story of sheet iron, tracing its history, its manufacturing processes, and ending with a description of the varied uses of Toncan iron sheets and Toncan copper molybdenum iron pipe. Special chapters take up annealing, galvanizing, galvannealing, impurities in iron, rust and corrosion, and stainless steels. The booklet includes a table of gauges and sizes of iron and steel sheets.

Polarizing Microscopes. The Bausch & Lomb Optical Company, Rochester, N. Y., has issued a new catalog on its series of Polarizing Microscopes. Four instruments are offered, ranging from a simple model for chemical work to a complete research instrument for petrographical work. A special model LA is offered for student use.

TEXTBOOK NEWS

♦ An attempt to relieve Governor Murray's textbook commission of the restraining order against it in the Oklahoma state controversy over the proposed new adoption of 35 per cent of textbooks in use, failed recently when District Judge W. G. Long overruled a motion to quash the suit at Norman. The textbook commission completed the tabulation of 22 bids and proceeded to award contracts. The new bids are expected to save parents money on future purchases of texts.

♦ An inventory of 6,000,000 textbooks in use in the Chicago public schools was recently completed by Mr. Don Rogers, director of the bureau of research. The 1934 appropriation for books, it was reported, was \$947,444, and an increase or decrease in the amount for 1935 will rest with the school-board members. Each elementary school has 14 books per pupil, and each high school 13 per pupil.

♦ The State Board of Education of Texas has awarded contracts for textbooks for use in the public schools for from one to six years. The gross value of the contracts was set at \$1,000,000. A total of 28 new contracts were adopted, at prices ranging from 10 cents to \$1.68 a book.

MARKET PLACE SECTION

FREE SAMPLE!

Babb's BAKELITE INKWELL No. 9

Non-Corrosive Bakelite Top — practically unbreakable — OUTLASTS the old out-moded type of inkwell top, yet — COSTS NO MORE!



Write today for a sample and see for yourself WHY more and more school executives are now saying "BAKELITE TOPS and nothing but, for our standard 2-thread inkwell glasses."

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COMPLETE STAGE EQUIPMENT and DRAPERIES

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TRADE MARK

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MY VOCATIONAL GUIDEBOOK

By Rodgers and Belman

Forces boys and girls to study themselves to discover their vocational aptitudes. 20 cents.

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FREE TEST SAMPLE has convinced hundreds of schools, of SLATEX efficiency and low cost. Write for yours today. Carbon Solvents Labs. 965 Broad Street Newark, N. J.

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GRAMMAR IN MINIATURE

By Fred G. Fox

A remarkably clear and concise statement of the essential principles of grammar—splendid for review purposes for high school students.

20 cents

The Bruce Publishing Co.
New York Milwaukee Chicago

Teachers' Salaries

♦ Swampscott, Mass. The school board has adopted a fixed salary schedule for women teachers, based on amount of preparation for the teaching profession. The minimum salary in all cases has been set at \$1,200, but the initial salaries are not fixed in the schedule.

The maximum salary for a teacher who has completed a two-year course in a state teacher's college is \$1,600, and for one having completed a three-year course, \$1,700. Teachers having successfully completed four years of college work will be paid a maximum of \$1,800 annually without a degree, and \$1,900 with a bachelor's degree.

Thirty hours of graduate work plus four years of college work will permit the payment of \$1,900 without a master's degree, or \$2,000 with a master's degree. Teachers having completed 60 hours of graduate work will be paid a maximum of \$2,000 without a doctor's degree, and \$2,100 if they have a doctor's degree. In all instances the annual increment is \$100.

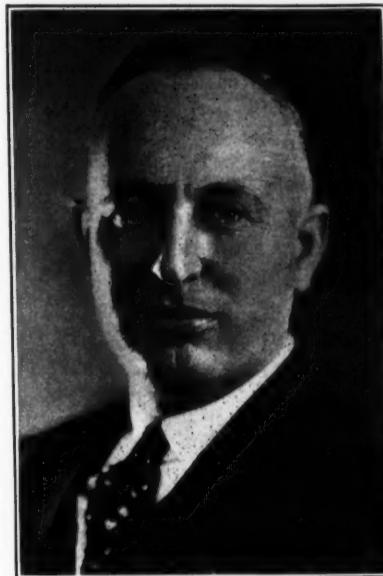
Teachers assigned as building assistants will receive a yearly salary of \$1,000, and substitute teachers will be paid at the rate of \$5 a day in the junior and senior high schools, and \$4 a day in the elementary schools.

Whenever teachers or principals are absent from duty on account of personal illness or quarantine, they will receive full pay for the first 10 consecutive days' absence, with a total of 10 days in any one school year.

♦ Simsbury, Conn. The board of education has restored teachers' salaries for the school year 1934-35. With the exception of increases withheld two years ago, all teachers are now receiving the full salary called for in the 1929 salary schedule.

♦ Niles Center, Ill. The board of education has adopted a salary schedule, providing increases of \$5 per month for grade teachers. The increases are conditional each year until the maximum of \$175 a month is reached and are given as a result of their advancement in professional preparation.

♦ Chicago Heights, Ill. Teachers' salaries in the lower groups have been increased \$5 a month for the school year 1934-35, under an order of the board of education. The action was taken because of an improvement in the financial situation of the school system.



DR. WILLARD E. GIVENS
Superintendent of Schools,
Oakland, California.

The appointment of Dr. Givens as permanent secretary of the National Education Association to succeed Mr. J. W. Crabtree, has been announced by President Henry Lester Smith of the Association.

Dr. Givens is a native of Indiana, 48 years of age, a graduate of Indiana University, and a holder of the doctoral degree from the University of California. He was for some years in charge of educational work in the Hawaiian Islands and has had extensive experience as principal, assistant superintendent, and superintendent of schools in San Diego and Oakland, California. Under his direction Oakland recently carried on an extensive program of junior-high-school building construction.

SCHOOL BOARD NEWS

♦ Indianapolis, Ind. The retirement of more than \$2,000,000 of the bonded indebtedness of the city schools has been accomplished during the administration of the present school board, according to a recent report of Mr. A. B. Good, business manager of the board. Mr. Good showed that the total bonded debt of the board was \$11,191,000 in 1930. Up to June 30, 1934, a total of \$1,768,000 in bonds had been paid at

maturity or retired by purchase in the open market. Since that time, additional bond retirements have raised the total figure to \$2,009,000. New bonds issued in the incumbency of the board total \$766,000, all of which were for building improvements. Bonds now outstanding total \$9,948,000.

♦ The chemistry department of the high school at Kenton, Ohio, recently took over the testing of the water for the city. No charge is made by the board for the work, but the city council furnished the equipment and supervised its installation in the chemistry laboratory.

NEW ENGLAND ASSOCIATION HOLDS MEETING IN BOSTON

The New England Association of School Superintendents held its annual meeting on November 8 and 9, in Boston, Mass. Mr. John J. Scully, president of the association, presided.

President Scully opened the meeting with a few introductory remarks. Mr. C. E. Fraser, who followed, talked on "The Business Man Views Education"; Dr. Eleanor T. Glueck gave a talk on "The Educator's Responsibility in Crime Prevention"; F. Laureston Bullard took for his topic "Keeping in Touch with the News"; and Douglas Malloch talked on "An Optimistic View."

At the second day's session, Mr. Warren A. Hanson, of New London, presided. Mr. Douglas Malloch, of Chicago, was the guest speaker. Mr. Patrick T. Campbell, of Boston, discussed "Our Government and How It Functions"; Mr. E. E. Oberholtzer, of Houston, Tex., talked on "Next Steps in the Educational Program"; and Cameron King, of New York, spoke on "The Race Before Us." At the afternoon session, Mr. L. S. Winchester spoke on "The Business Horizon" and Mr. Sherman Rogers, of New York, discussed "Consolidating our Gains."

The association endorsed Supt. A. J. Stoddard as New England's candidate for the next president of the Department of Superintendence. Supt. W. H. Pillsbury, of Schenectady, and Supt. G. R. Staley, of Rome, were present and pledged the support of New York State.

The association elected the following officers for the ensuing year: President, Supt. L. C. Hunt, Huntington, Vt.; vice-president, Supt. G. R. Gardner, Auburn, Me.; secretary-treasurer, Supt. B. J. Merriam, Framingham, Mass. Directors for the three-year period comprise Supt. F. W. Burrill, Augusta, Me.; Supt. C. A. Towle, Exeter, N. H.; and Supt. C. L. Erwin, Ludlow, Vt.

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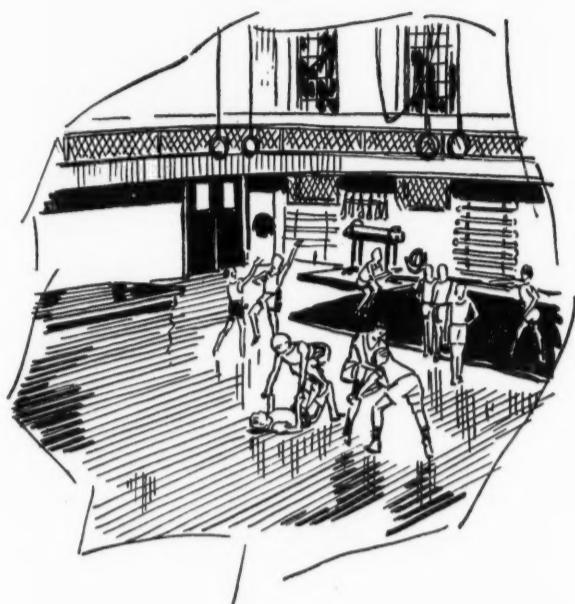
North or South, East or West,—wherever you may be during the holiday season, we again send you greetings from the home of the Wyandotte Indian. May the New Year bring you a fuller share of contentment and prosperity and as much genuine pleasure in all your business relationships as we have felt in our relationship with you!

The J. B. FORD COMPANY, Wyandotte, Michigan



CHRISTMAS HINTS

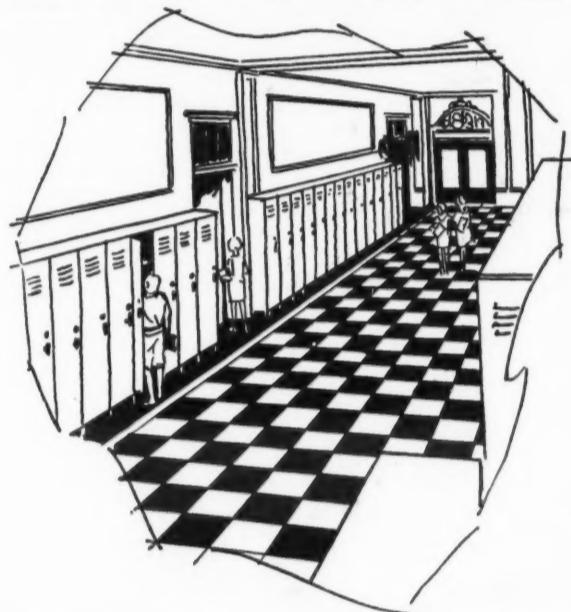
for School Executives



Christmas means holidays for pupils — but an ideal working time for the school maintenance force—time to scrub, wax, fill and polish floors for the wear of winter and spring.

GIVE THE GYM FLOOR A COAT OF GLOSS SEAL

For surface sealing your gymnasium floor, corridor, or assembly room, FINNELL Gloss Seal is ideal. Without brittleness of varnish, without the slipperiness of wax, it forms a surface that will stand hardest wear, resist the effects of soaps and acids, will not rubber burn, will not darken. For floors of lighter traffic, FINNELL Gloss Seal No. 2 is less expensive and highly serviceable.



FRESH WAX FOR CORRIDORS

Corridors or any other areas which have a polished surface may be renewed, refreshed, quickly and inexpensively with one of the several FINNELL waxes. Why not try FINNELL Kote, the wax that is applied hot? It sets in 10 seconds, leaves no slippery surface, no odors. Gives long wear with fewer waxings.

Other FINNELL products include Liquid Kote, a high solid content wax; Fulfil, for filling porous floors; Solarbrite, a safe and effective soap solution; Finola, the standard scouring powder for thirty years.

GIVE EVERY FLOOR A GOOD SCOURING OR POLISHING



Interchangeable brush ring adapts same machine as used for large areas to space in aisles and beneath desks.

Simplify the whole process by specifying FINNELL floor materials and FINNELL floor machines. We can arrange to supply you with one of the latest model FINNELL polishing-scrubbing machines.

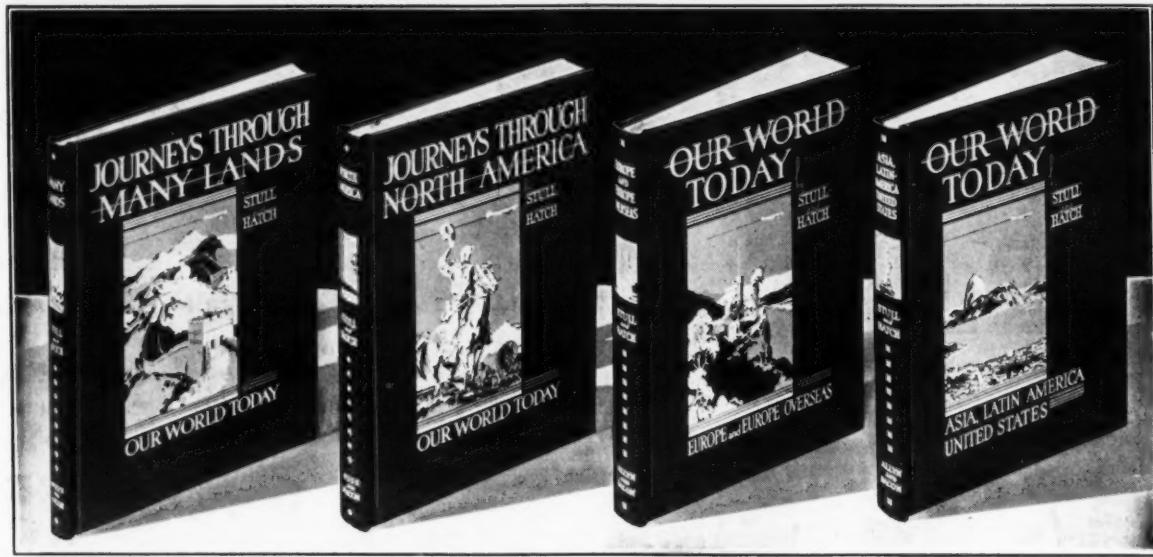
Brush revolutions 230 per minute—increased weight per square inch of brush surface—powered by General Electric Motor. Offset design enables it to reach under equipment. Wheels make it easy to control. Short wheel base gives flexibility.

Two heat-treated, hand-polished gears, of steel and bronze, running in extra large grease case, result in virtually noiseless operation.

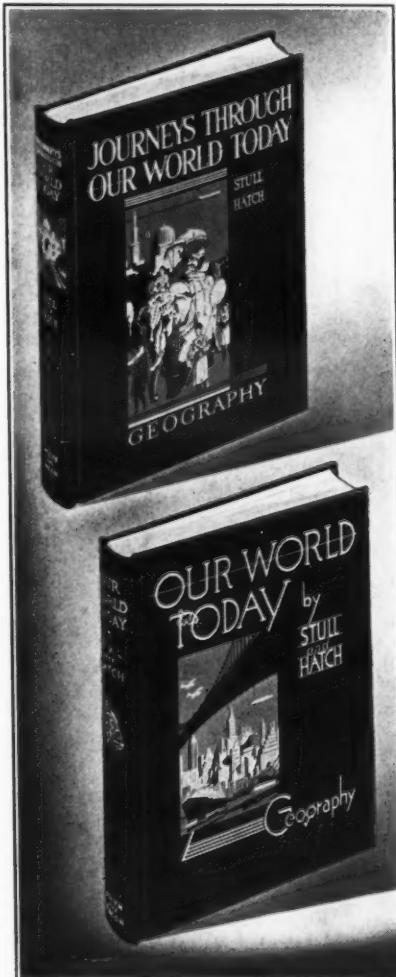
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